INSTRUCTION MANUAL

SERIES

1250

UNIVERSAL SWITCH CONTROLLER

RACAL-DANA

RACAL

The Electronics Group

VOLUME 2 OF 2
PUBLICATION NO. 980609

SERIES 1250
UNIVERSAL SWITCH CONTROLLER

RACAL-DANA

RACAL-DANA INSTRUMENTS INC.
4 Goodyear Street, P.O. Box C-19541, Irvine, CA 92713
Telephone: 714/859-8999, FAX: (714)859-2505

RACAL-DANA INSTRUMENTS LTD.
Hardley Industrial Estate, Hythe, Southampton, Hampshire SO4 6ZH, England
Telephone: (0703) 843265, FAX: (0703) 848919, TLX: 47600

RACAL-DANA INSTRUMENTS S.A.
18 Avenue Dutartre, 78150 Le Chesnay, France
Telephone: 3-955-8888, TLX: 697215

RACAL-DANA INSTRUMENTS GmbH
Frankenforster Strasse 21, 5060 Bergisch Gladback 1, Federal Republic of Germany
Telephone: 2204 60081, TLX: 887 8428

RACAL-DANA INSTRUMENTS ITALIA srl.
Via Mecenate 84/A, 20138 Milano, MI, Italy
Telephone: (02) 5062767/5052686/503444, TLX: 315697

RACAL

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SECTION 5 CHASSIS DRAWINGS

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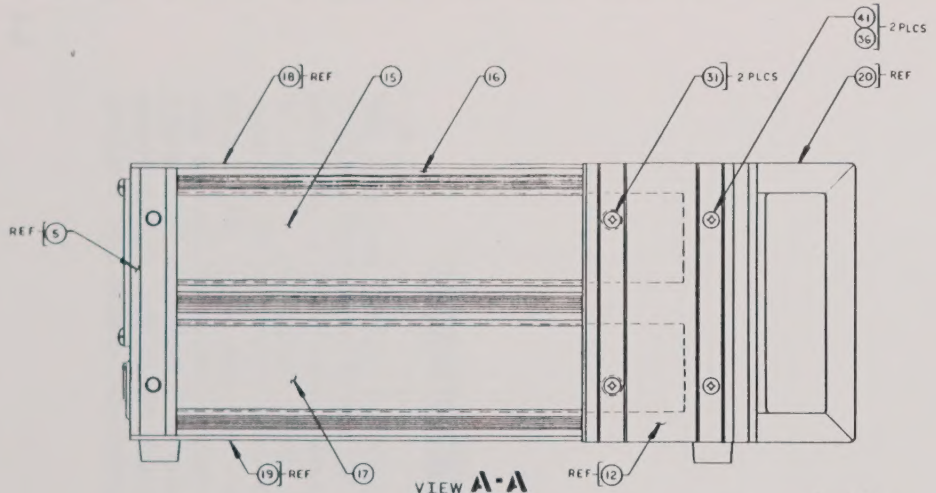
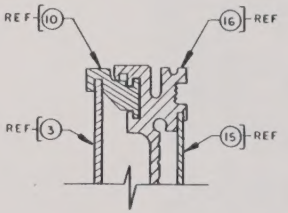


VIEW A-A
SCALE: 1:1



SECTION E-E
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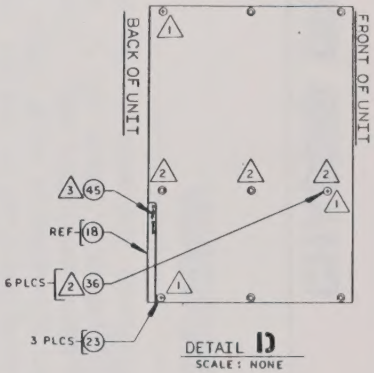
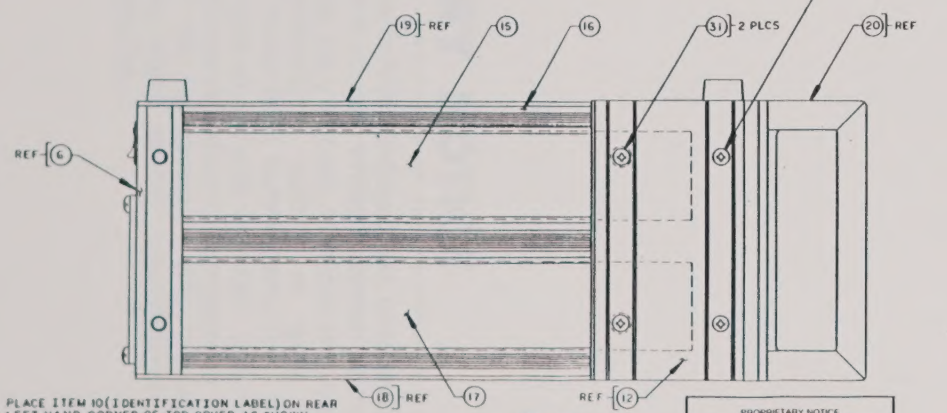
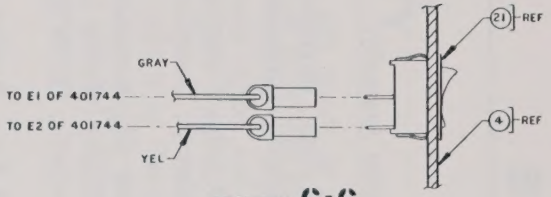
TOP END SHOWN ONLY



DETAIL D
SCALE: NONE



VIEW B-B
SCALE: 1:1



SECTION C-C
SCALE: NONE

3. PLACE ITEM 10 (IDENTIFICATION LABEL) ON REAR LEFT HAND CORNER OF TOP COVER AS SHOWN. LETTERING TO READ FROM BACK OF UNIT.

2. APPLY LOCTITE (ITEM 36) 6 PLCS, (3 PLCS TOP COVER) ITEM 18, ((3 PLCS BOTTOM COVER) ITEM 19 AFTER TEST.

1. INSTALL 3 SCREWS (ITEM 23) ONLY WHERE SHOWN IN DETAIL D. INSTALL ADDITIONAL 6 SCREWS (ITEM 23) AFTER TEST.

NOTES: UNLESS OTHERWISE SPECIFIED

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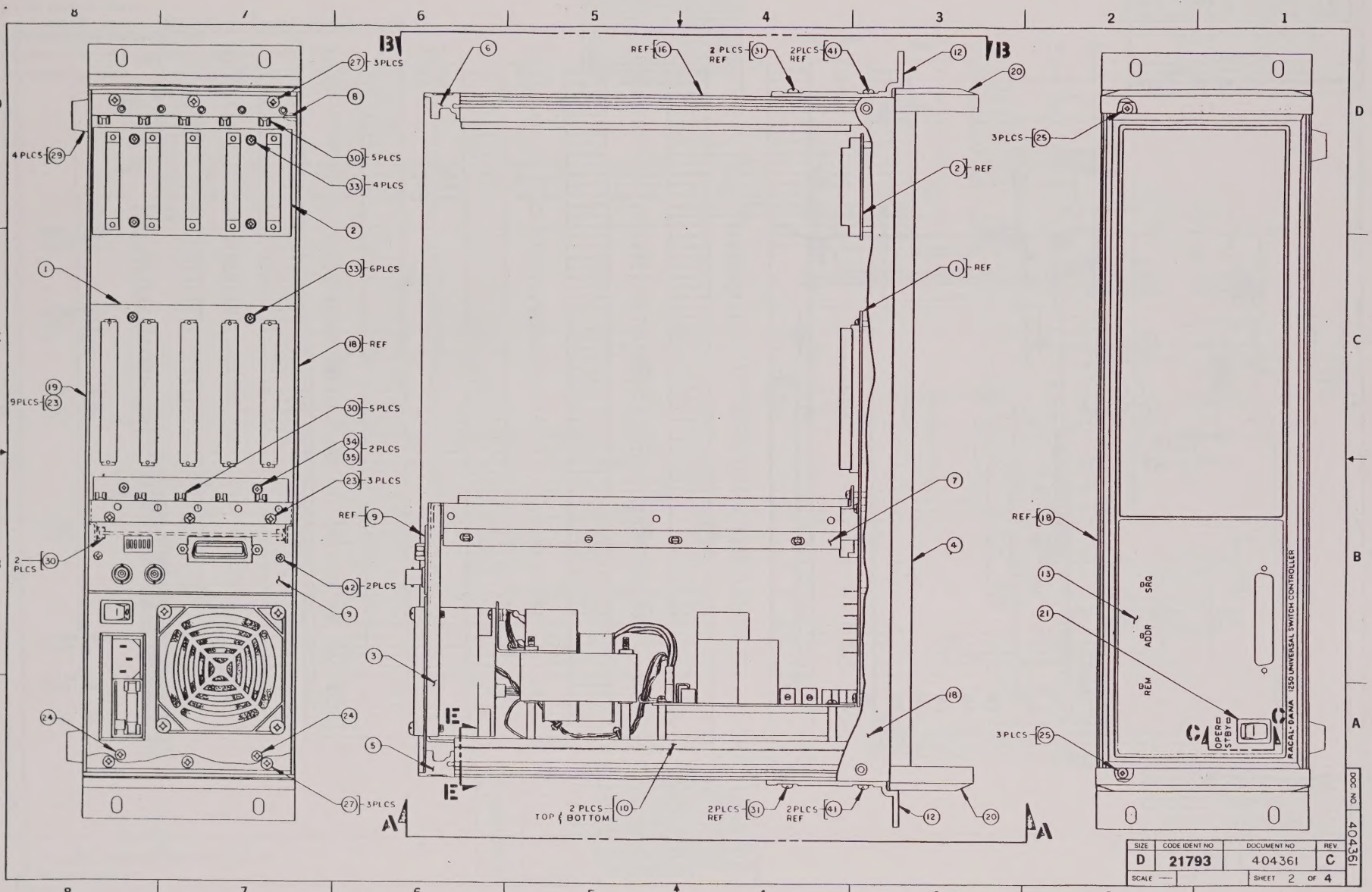
DOCUMENT TITLE: CHASSIS ASSY, 1250

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404361	C

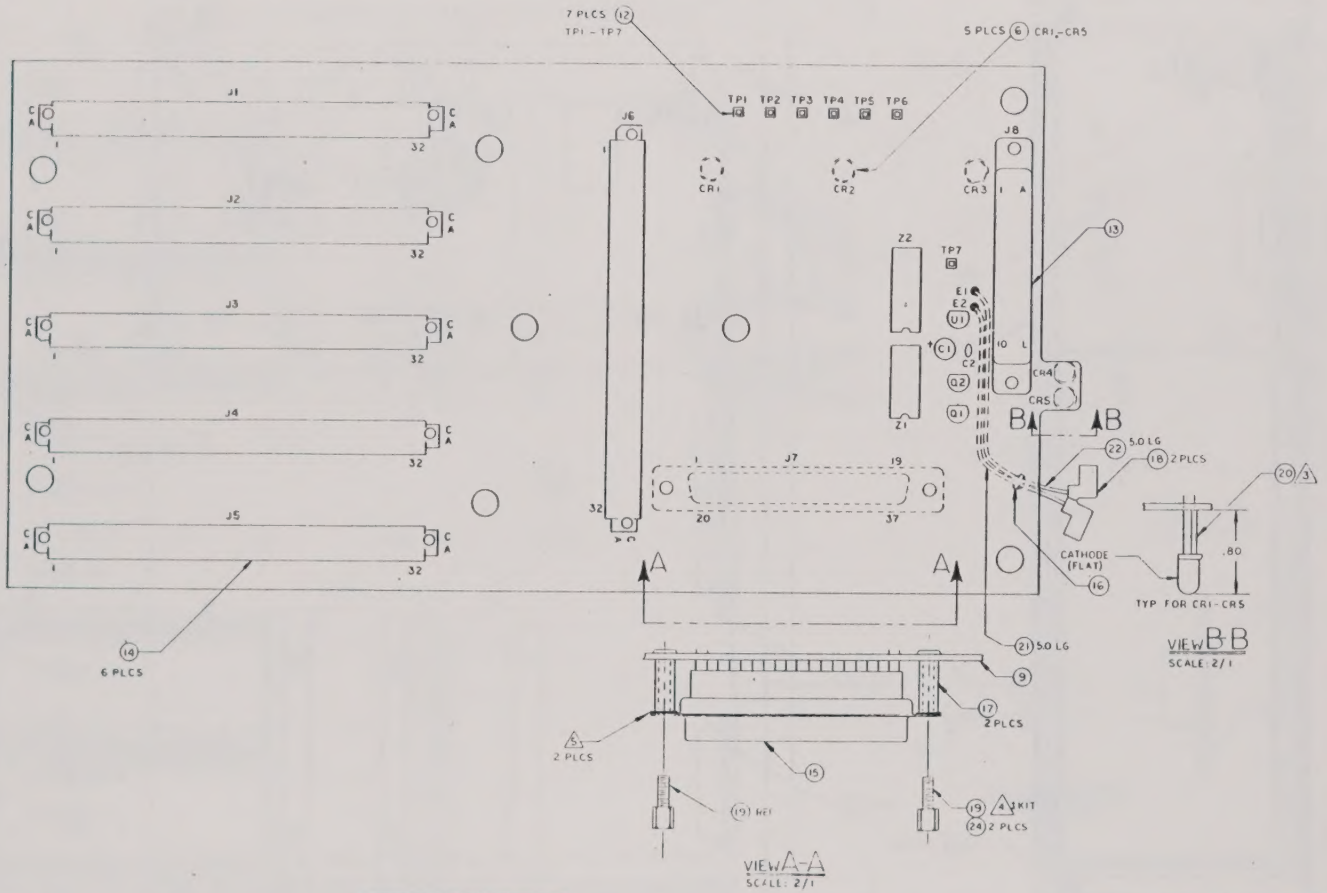
SCALE — SHEET 1 OF 4

DOC NO 404361



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404361	C
SCALE —		SHEET 2 OF 4	

404361 CN 300



(3) SLEEVING + SIDE ONLY. (ANODE LEAD)

(4) DISCARD NUTS AND LOCK WASHER SUPPLIED WITH ITEM 19.

(5) INSTALL FLAT WASHER SUPPLIED WITH ITEM 19.

2 COMPONENTS SHOWN IN DASHED LINES ARE INSTALLED ON CIRCUIT SIDE OF PCB.

1. REF SCHEMATIC 431744.

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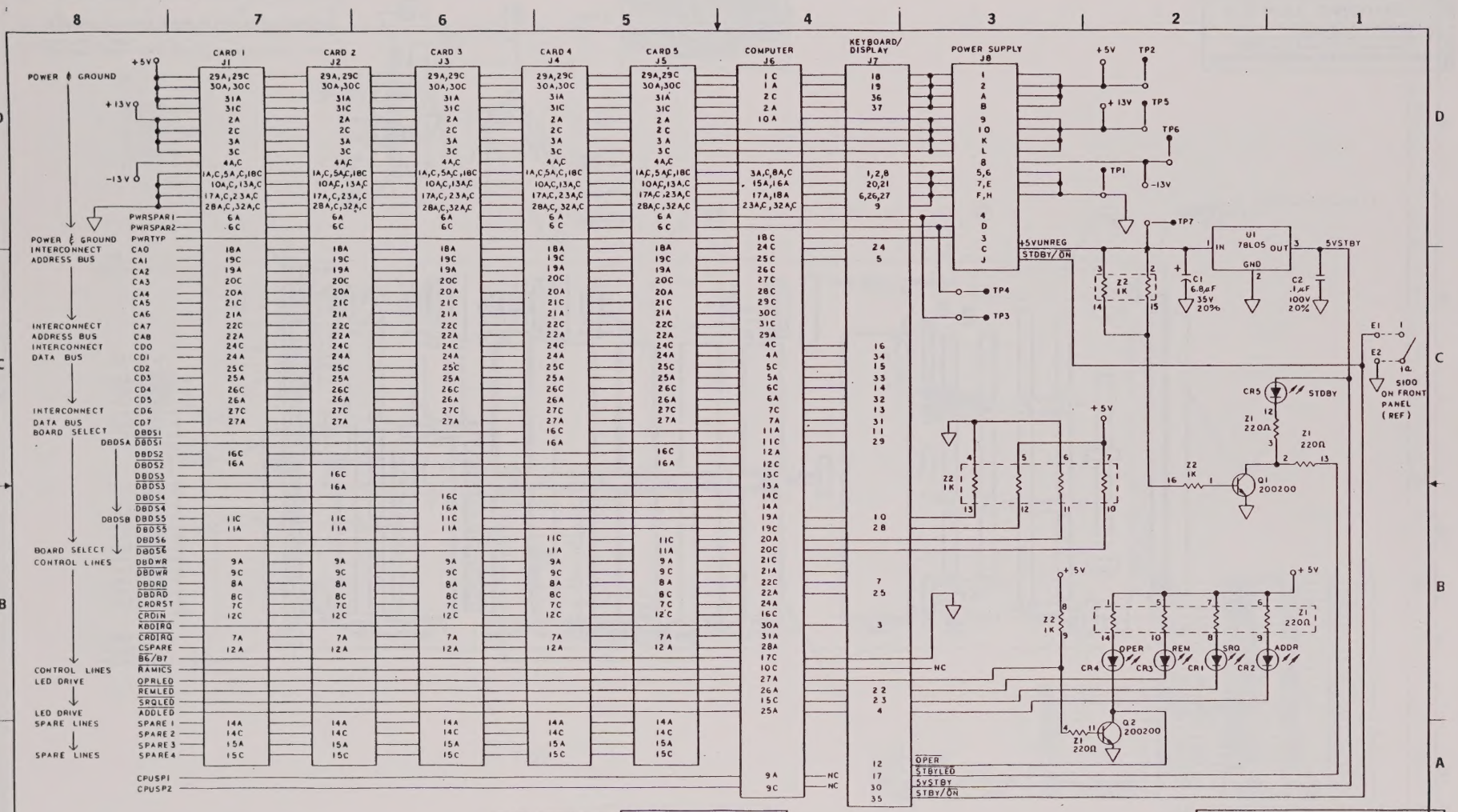
DOCUMENT TITLE: PCB ASSY, INTERCON.

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401744	B

SCALE NONE | SHEET 1 OF 2

DOC NO 401744



1. ALL RESISTOR NETWORK TOLERANCES ARE ± 2%.

NOTES UNLESS OTHERWISE SPECIFIED

REFERENCE DESIGNATIONS	
Z2	
U1	
Q2	
TP7	
J8	
E2	
CR5	
C2	
HIGHEST	NOT USED

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DOCUMENT TITLE

SCHEM., INTERCONNECT

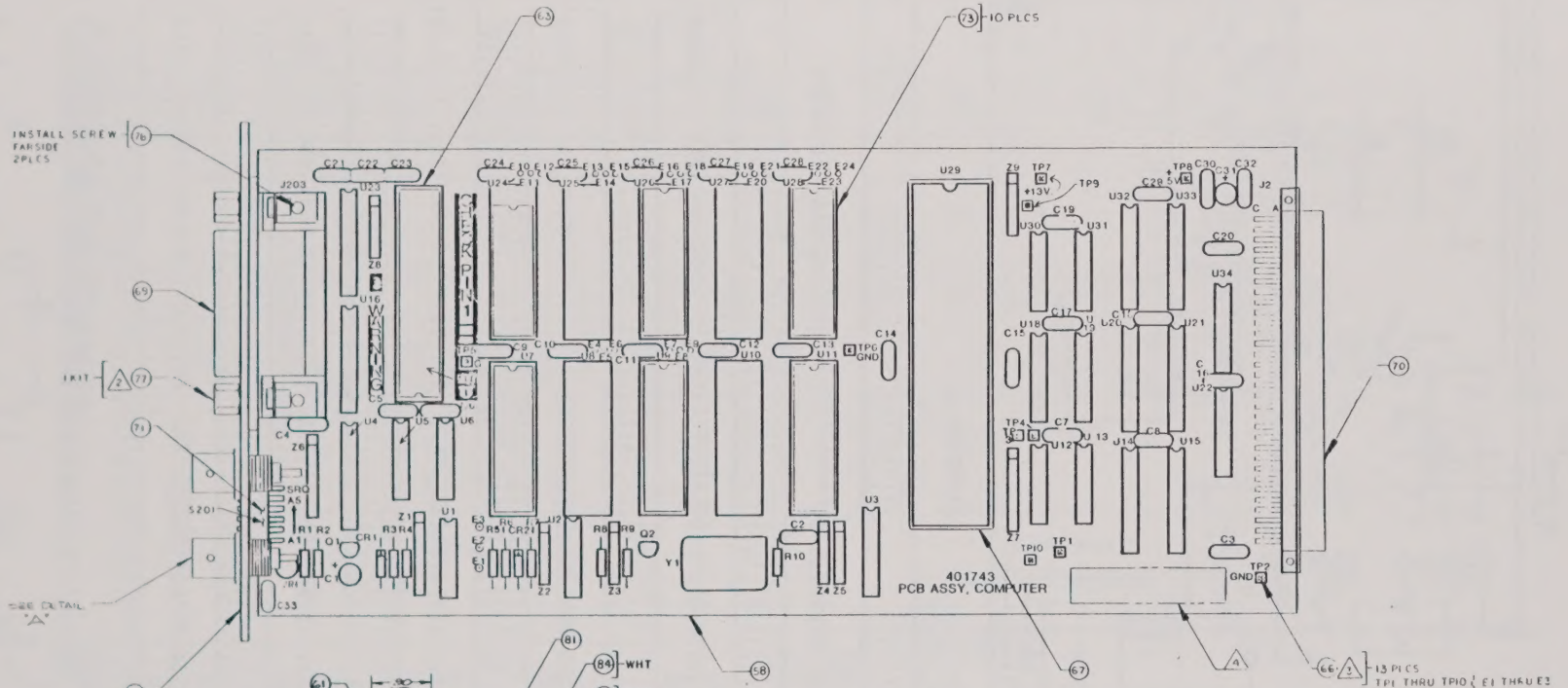
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
D	21793	431744	A

SCALE —

SHEET 1 OF 1

DOC NO. 431744

515



4. INKSTAMP RACAL-DANA SERIAL" APPROX. WHERE SHOWN COMPONENT SIDE.

3. TRIM POST (ITEM 66) TO MAX. HEIGHT OF .2" ABOVE PCB.

2. DISCARD NUTS (2) & LOCKWASHERS (2) SUPPLIED WITH ITEM 77.

1. REFERENCE SCHEMATIC 431743.

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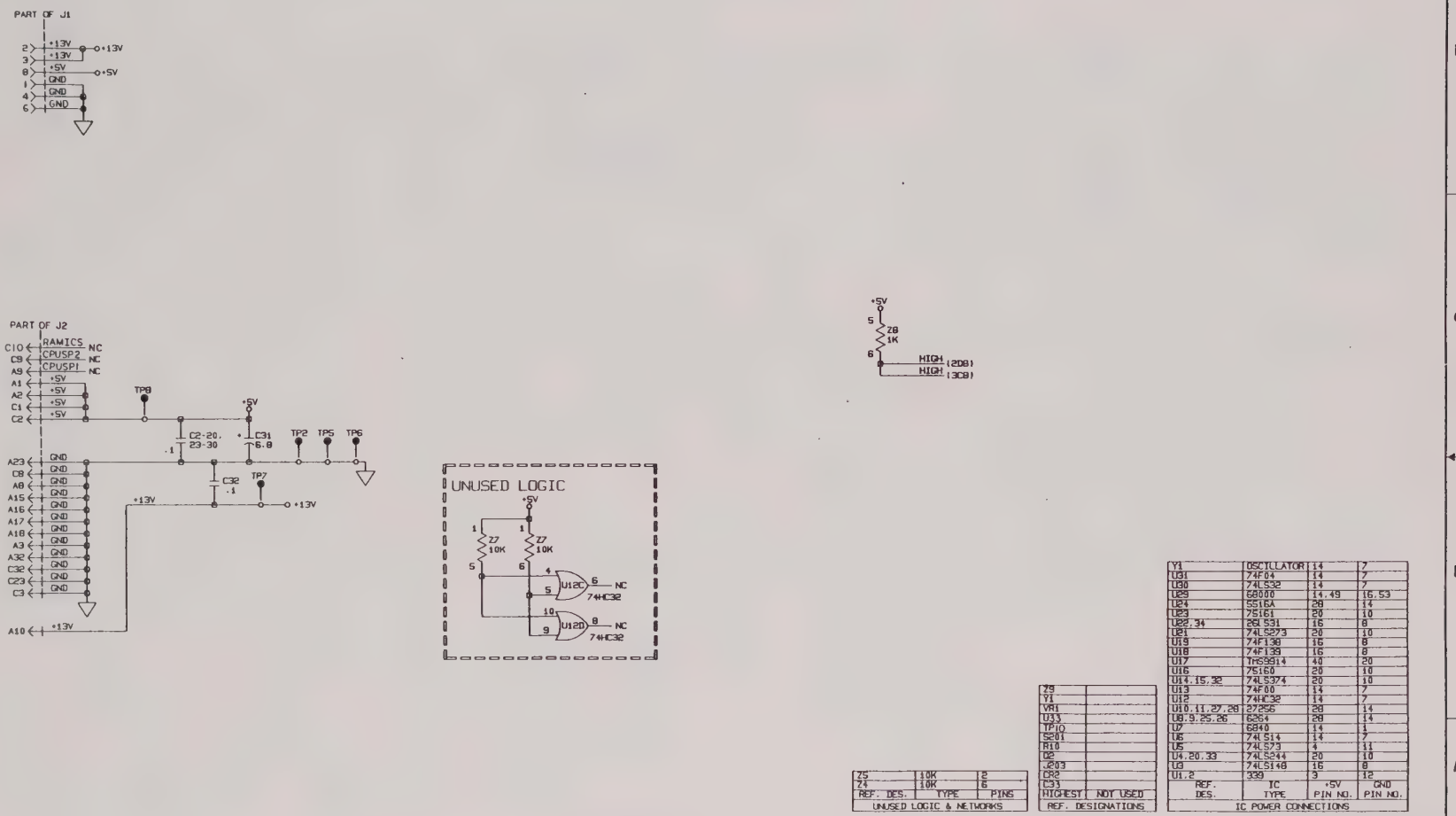
DOCUMENT TITLE: PCB ASSY, COMPUTER			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 401743	REV: A
SCALE: 2:1		SHEET 1 OF 6	

DOC NO 401743



Y1	OSCILLATOR	14	7
U31	74F04	14	7
U30	74LS32	14	7
U29	68000	14,49	16,53
U24	5516A	28	14
U23	75161	20	10
U22,34	2651	16	8
U21	74LS273	20	10
U19	74F138	16	8
U18	74F139	16	8
U17	TMS9914	40	20
U16	75160	20	10
U14,15,32	74LS374	20	10
U13	74F00	14	7
U12	74HC32	14	7
U10,11,27,28	27256	28	14
U8,9,25,26	6264	28	14
U7	6840	14	1
U6	74LS14	14	7
U5	74LS73	4	11
U4,20,33	74LS244	20	10
U3	74LS148	16	8
U1,2	339	3	12
REF. DES.	IC TYPE	+5V PIN NO.	GND PIN NO.

IC POWER CONNECTIONS

Z5	10K	8	
Z4	10K	6	
REF. DES.	TYPE	PINS	

UNUSED LOGIC & NETWORKS

Z9	
Y1	
VR1	
U33	
TP10	
S201	
R10	
D2	
J203	
CR2	
C33	
HIGHEST	NOT USED

REF. DESIGNATIONS

NOTE: PIN NUMBERS SHOWN ARE SOCKET PIN NUMBERS. SOCKET & IC PIN NUMBERS WILL DIFFER WHEN A 20X8 DEVICE IS INSTALLED IN THIS SOCKET.

3. RESISTOR VALUES ARE IN OHMS.± 5%. 1/4W UNLESS OTHERWISE SPECIFIED.
2. CAPACITOR VALUES ARE IN MICROFARIDS.± 20%.100V UNLESS OTHERWISE SPECIFIED.
1. RESISTOR NETWORKS± 2%.

NOTES: UNLESS OTHERWISE SPECIFIED

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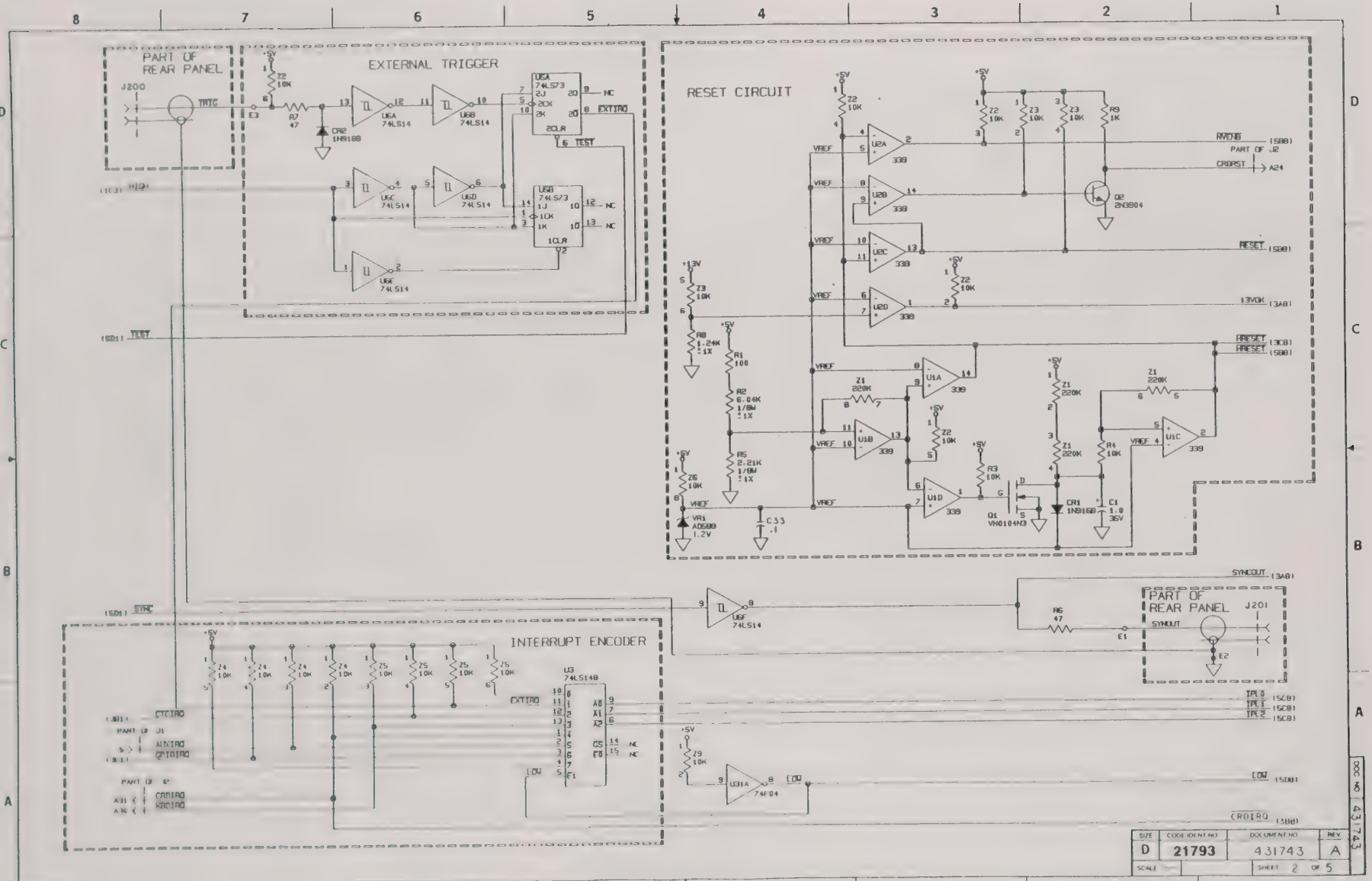
DOCUMENT TITLE
SCHEM.,COMPUTER

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431743	A

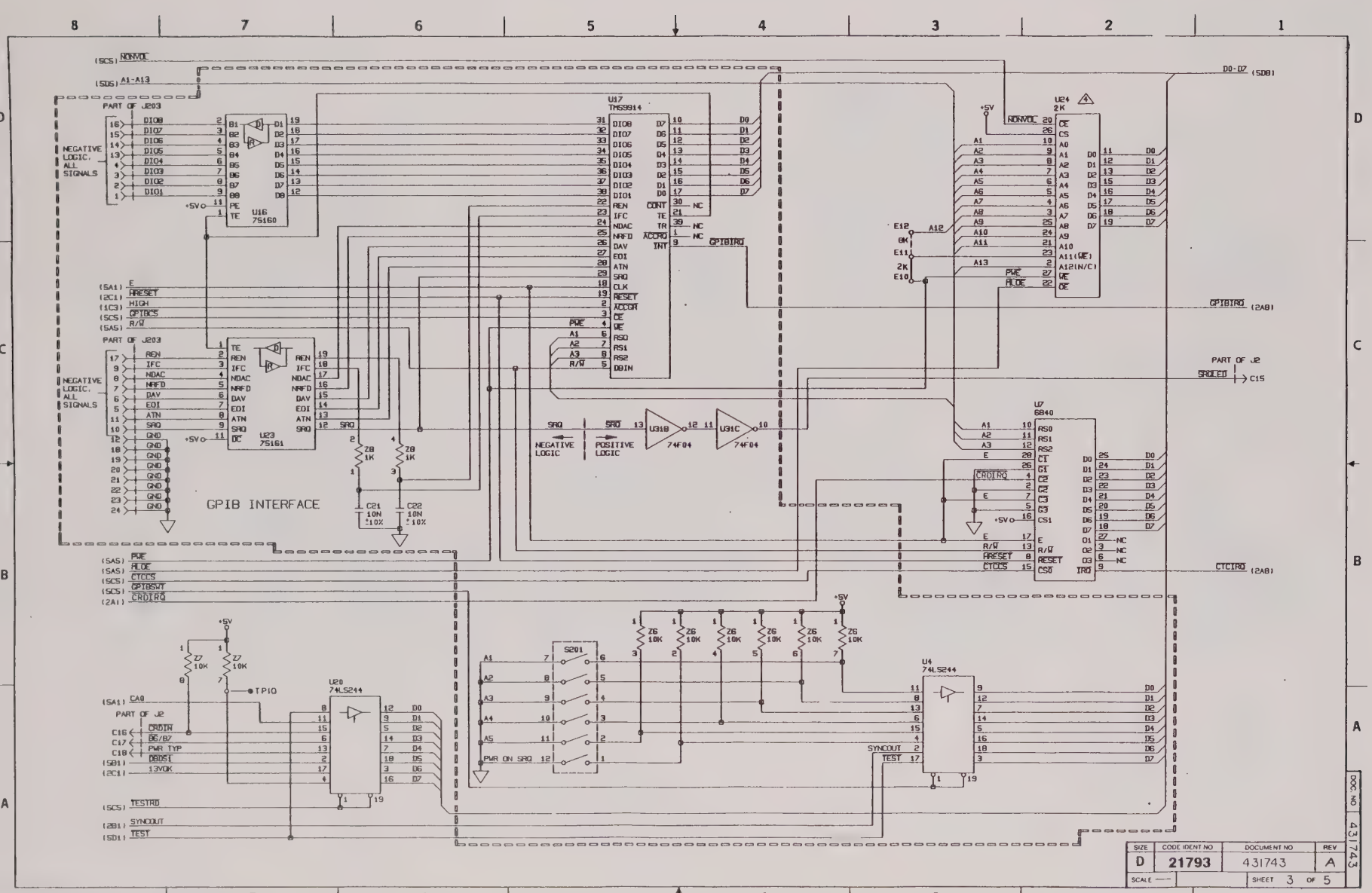
SCALE — SHEET 1 OF 5

DOC NO 431743



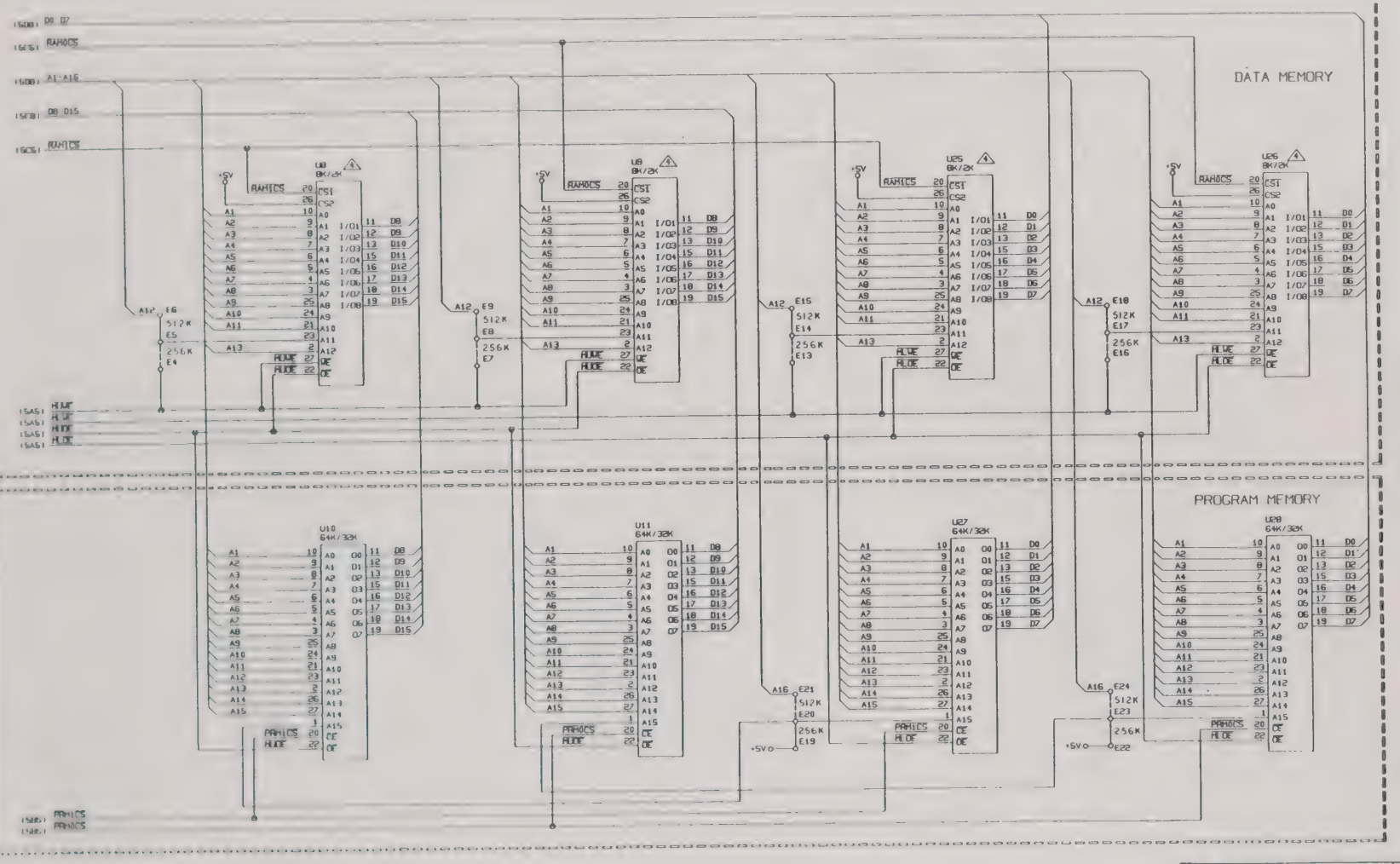
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431743	A
SCALE		SHEET 2 OF 5	

DOC # 431743



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431743	A
SCALE —		SHEET 3 OF 5	

DOC NO 431743



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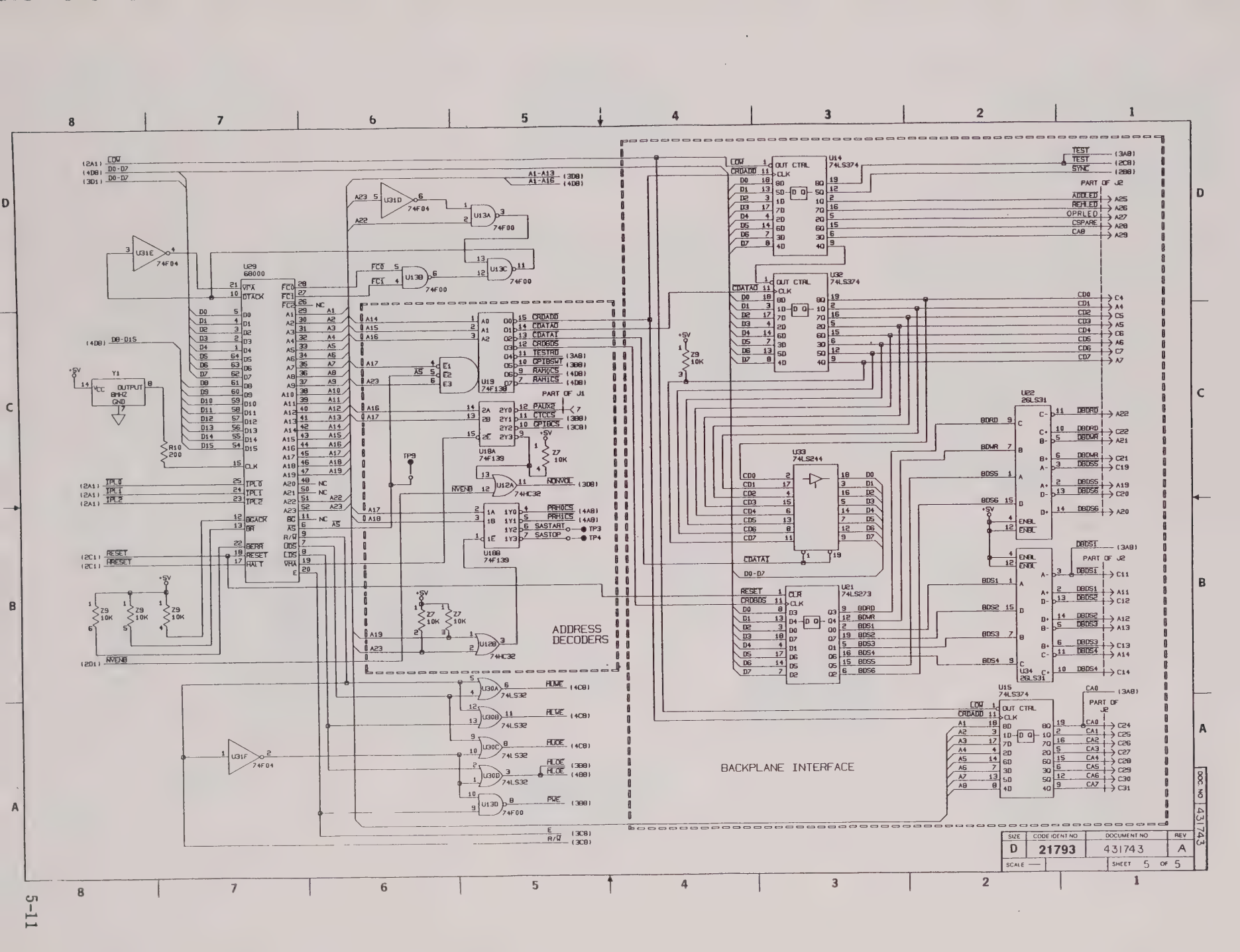
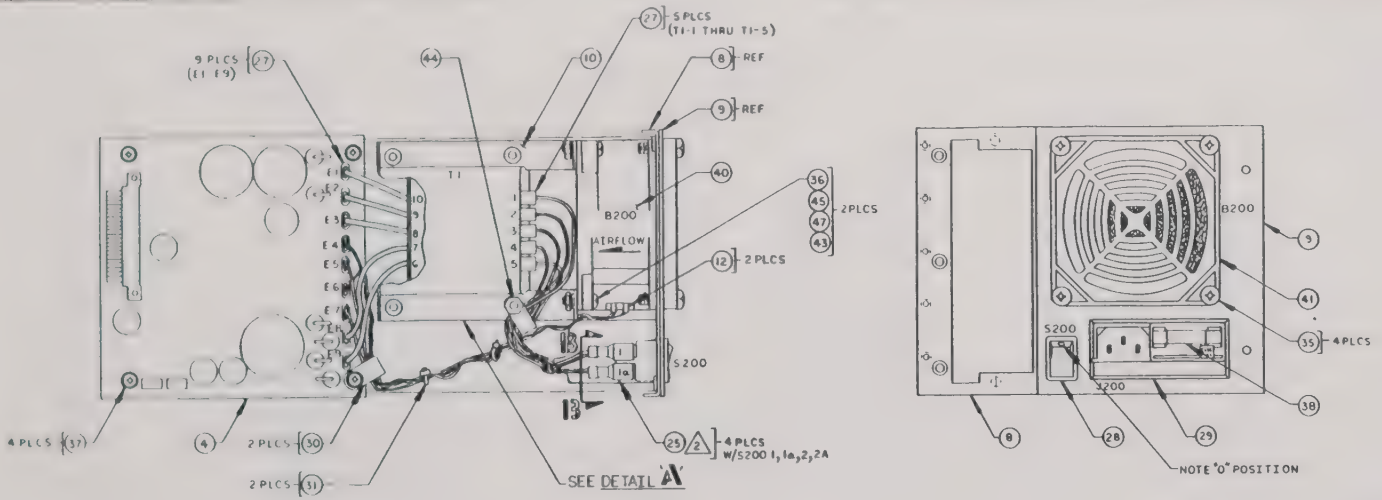
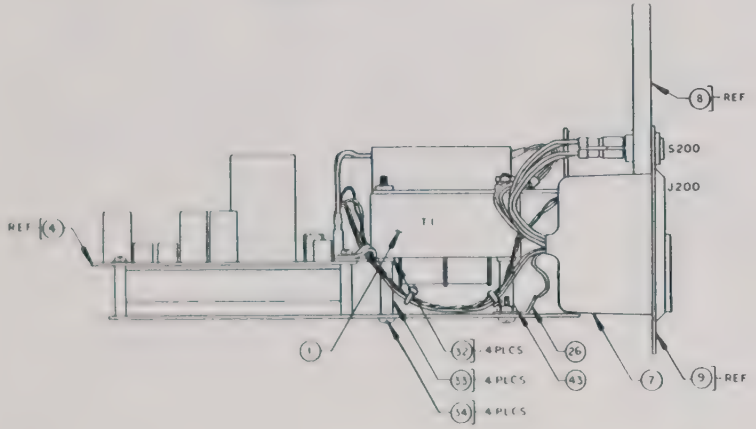
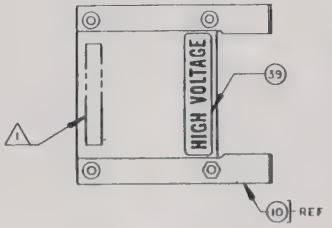
D	21793	43143	A
SCALE		SHEET 4 OF 5	

DOC NO 43143


ADDRESS DECODERS
BACKPLANE INTERFACE
U29 68000
U14 74LS374
U32 74LS374
U33 74LS244
U21 74LS273
U15 74LS374
U22 26LS31
U34 26LS31
U19 74F139
U18A 74F139
U18B 74F139
U12A 74HC32
U12B 74HC32
U13A 74F00
U13B 74F00
U13C 74F00
U13D 74F00
U30A 74LS32
U30B 74LS32
U30C 74LS32
U30D 74LS32
U31D 74F04
U31E 74F04
U31F 74F04
Y1 8MHZ OUTPUT GND VCC
R10 200
Z9 10K
Z7 10K
PART OF J1
PART OF J2
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431743
REV A
SCALE —
SHEET 5 OF 5
DOC NO 431743







DETAIL A
SCALE: NONE

VIEW B-B
SWITCH SHOWN ONLY
SCALE: NONE

WIRE PREP CHART

AMP POWER TERMINAL STRIP WIRE .25	(25) REF 4 PLCS — TO S200 1, 1a, 2, 2a (ITEM 28)
600022 SOLDER LUG STRIP WIRE .25	(26) REF — TO ITEM 8
WIRE STRIPPED ONLY .25	TO J200 (ITEM 29) TO B200 (ITEM 40) 10 PLCS
AMP POWER TERMINAL STRIP WIRE .25	(27) REF 14 PLCS — TO ITEM 4 E1-E9 / TO ITEM 1 T1-1 THRU T1-5

NOTE: REFER TO WIRELIST FOR ADDITIONAL INFORMATION.

(2) MARK TERMINAL DESIGNATOR (1, 1a, 2, 2a) USING INKPEN

(1) STAMP SERIAL # APPROXIMATELY WHERE SHOWN.

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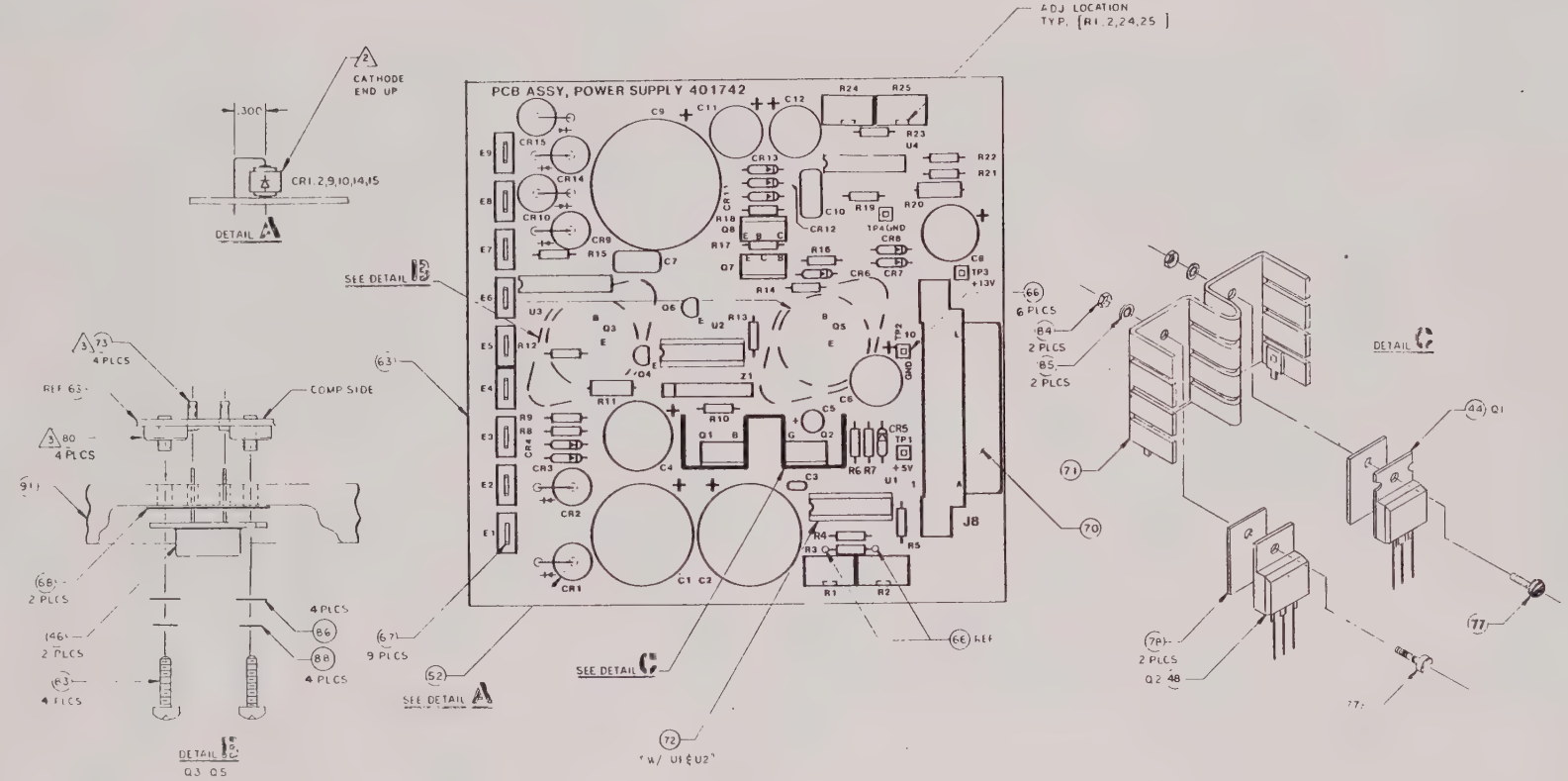
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE
POWER SUPPLY ASSY

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404362	A

SCALE —— SHEET 1 OF 4

DOC NO 404362



THESE COMPONENTS MUST BE INSTALLED FLUSH TO PCB AS SHOWN

SOME DIODES HAVE A SCHEMATIC SYMBOL ON THE SIDE, AS SHOWN; OTHERS HAVE A POLARITY BAND AT THE CATHODE END

1. REF SCHEM 431742

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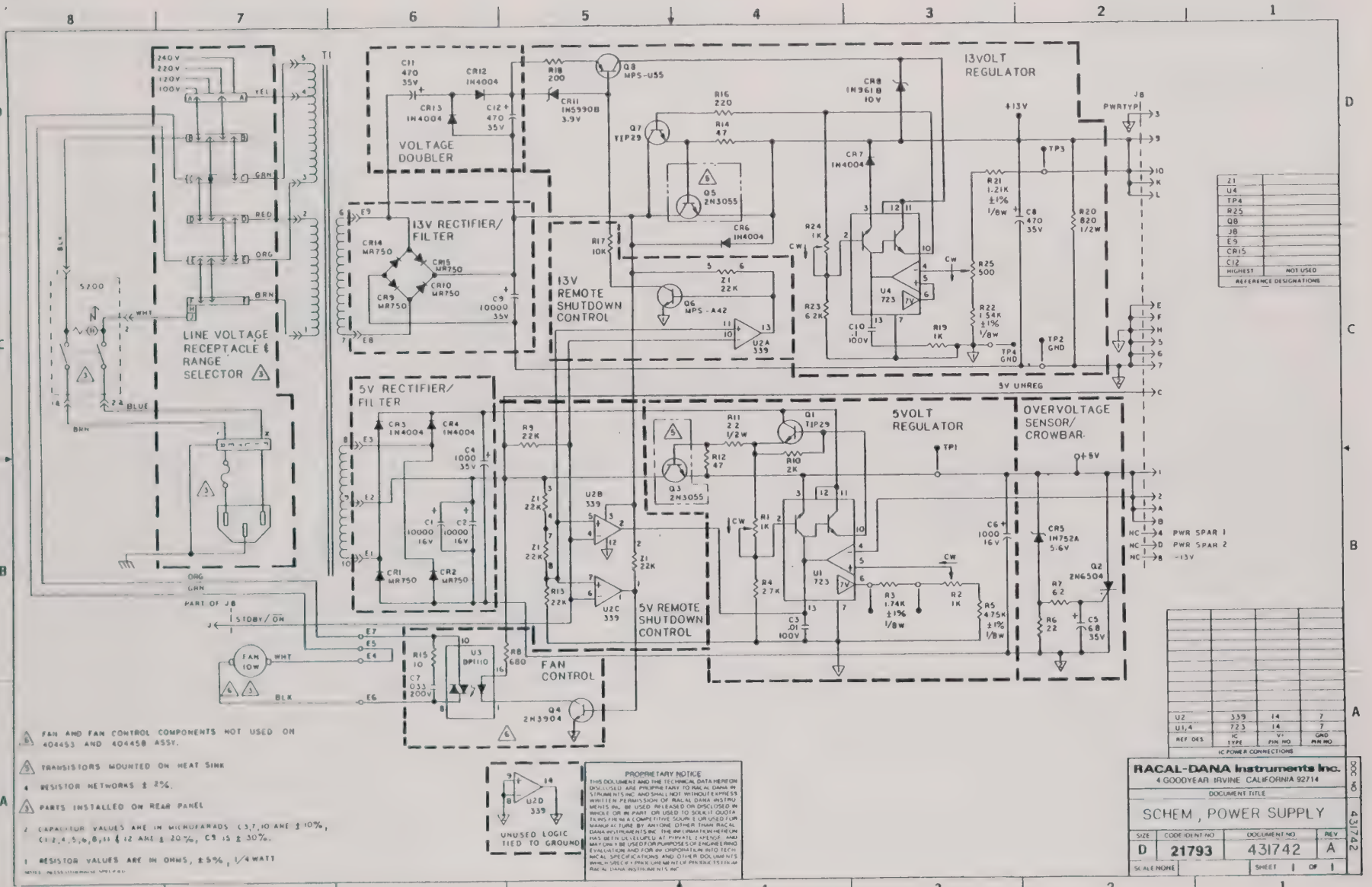
DOCUMENT TITLE: PCB ASSY, POWER SUPPLY

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401742	B

SCALE NONE | SHEET 1 OF 5

DOC NO 401742



Z1	
U4	
TP4	
R25	
Q8	
J8	
E9	
CR15	
C12	
HIGHEST	NOT USED

REFERENCE DESIGNATIONS

REF DES	IC TYPE	V+ PIN NO	GND PIN NO
U2	339	14	7
U1,4	723	14	7

IC POWER CONNECTIONS

⚠1 FAN AND FAN CONTROL COMPONENTS NOT USED ON 404453 AND 404458 ASSY.

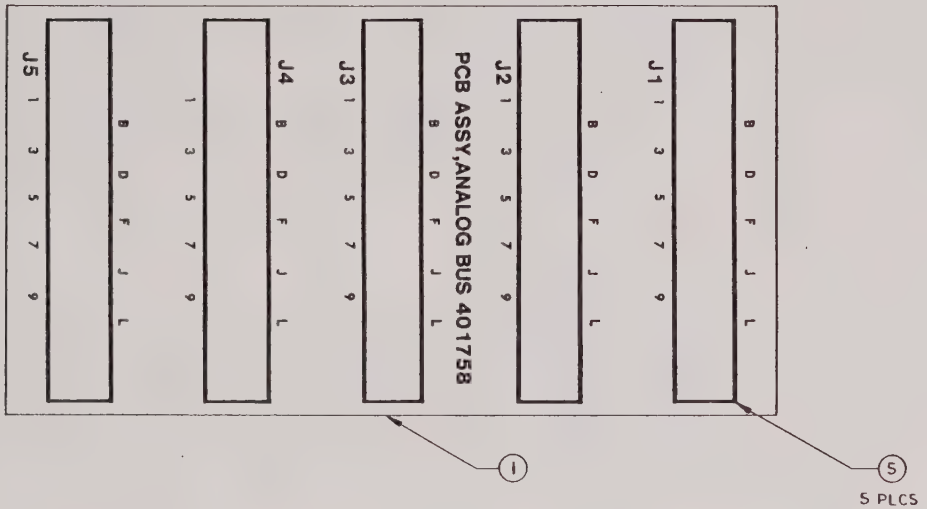
⚠2 TRANSISTORS MOUNTED ON HEAT SINK

4 RESISTOR NETWORKS ± 2%.

⚠3 PARTS INSTALLED ON REAR PANEL

2 CAPACITOR VALUES ARE IN MICROFARADS (C3,7,10 ARE ± 10%, C1,2,4,5,6,8,11 & 12 ARE ± 20%, C9 IS ± 30%.

1 RESISTOR VALUES ARE IN OHMS, ±5%, 1/4 WATT



2. J1-J5 MUST BE INSTALLED AS SHOWN.NOTE ORIENTATION OF PIN 1
1. REF. SCHEMATIC 431758

NOTES UNLESS OTHERWISE SPECIFIED

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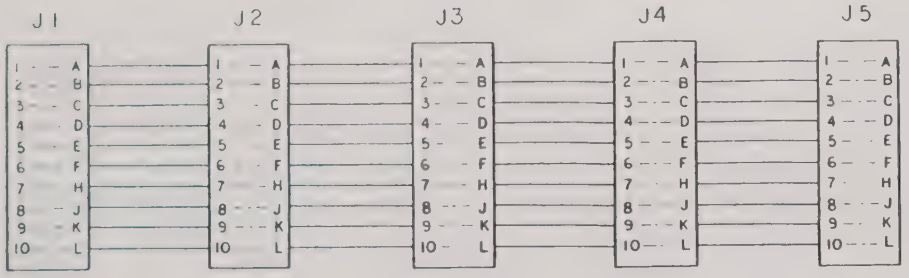
DOCUMENT TITLE
PCB ASSY, ANALOG BUS

SIZE	CODE IDENT NO	DOCUMENT NO	REV
C	21793	401758	A

SCALE NONE | SHEET 1 OF 2

DOC NO 401758



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4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE
SCHEM, ANALOG BUS

SIZE	CODE IDENT NO	DOCUMENT NO	REV
C	21793	431758	A

SCALE NONE SHEET 1 OF 1

DOC NO 431758

NOTES: UNLESS OTHERWISE SPECIFIED

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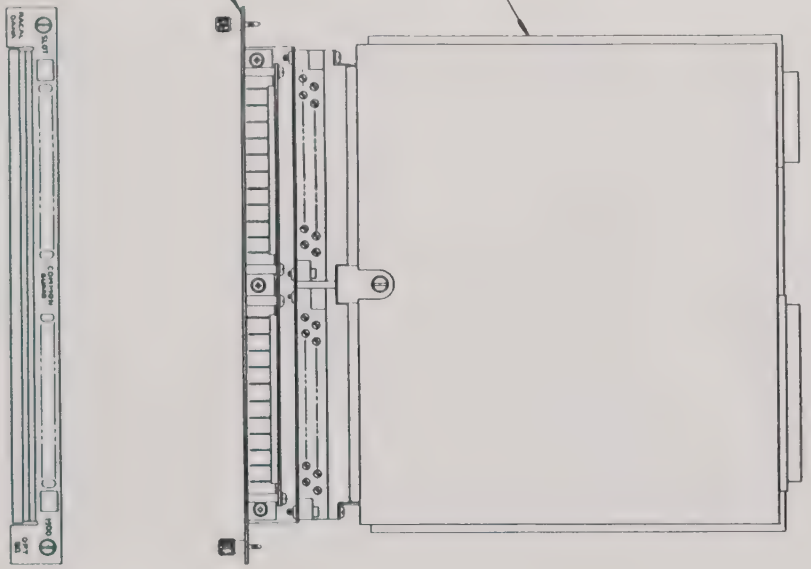

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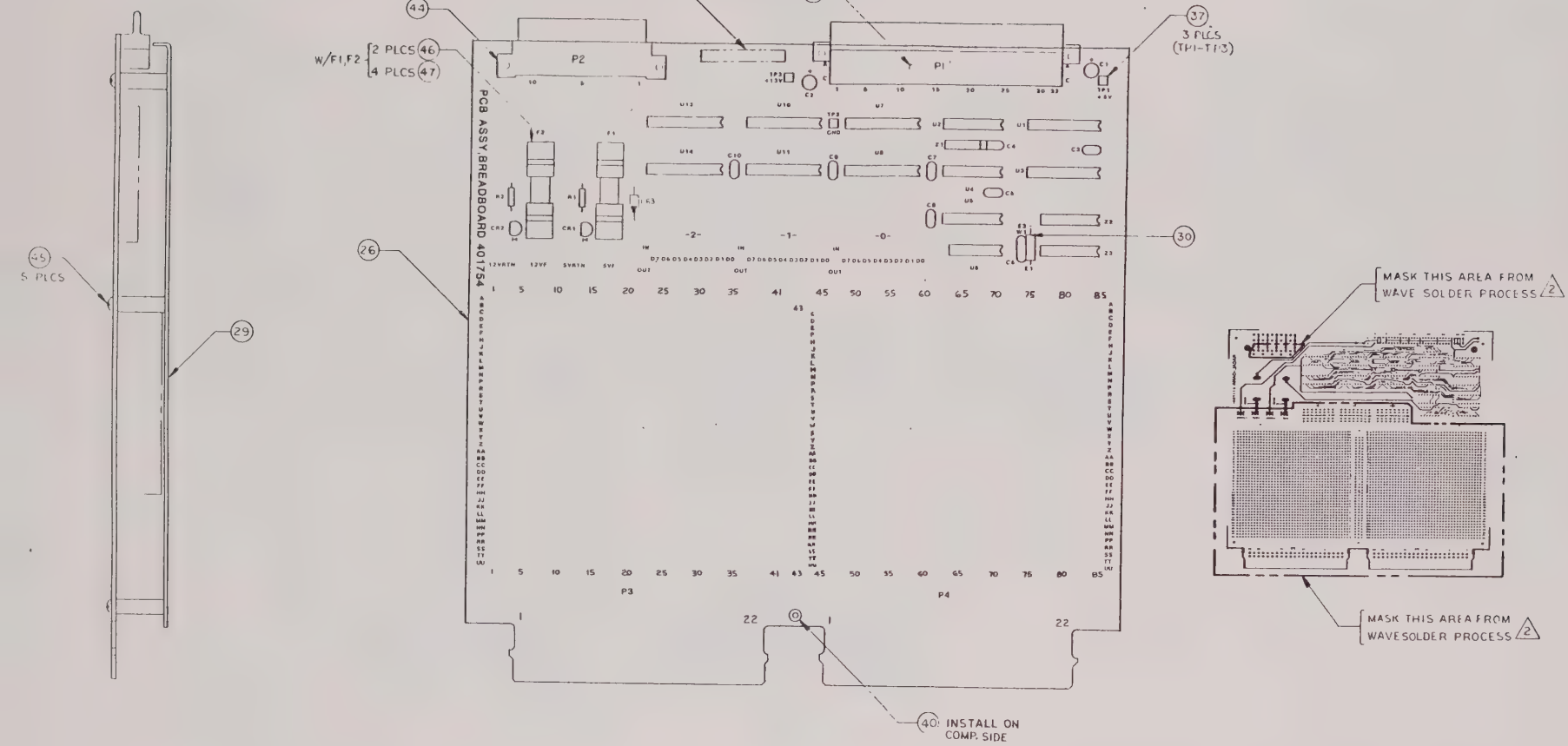
RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE CALIFORNIA 92714			
DOCUMENT TITLE			
BRDBOARD ASSY, OPT.10			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404447	A
SCALE —		SHEET 1 OF 2	

404447



3 INK STAMP SERIAL NUMBER ON CIRCUIT SIDE IN INDICATED AREA.

2 HOLES IN THIS AREA MUST BE FREE OF SOLDER
1 REF SCHEMATIC 431754.
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DOCUMENT TITLE
PCB ASSY,BREADBOARD

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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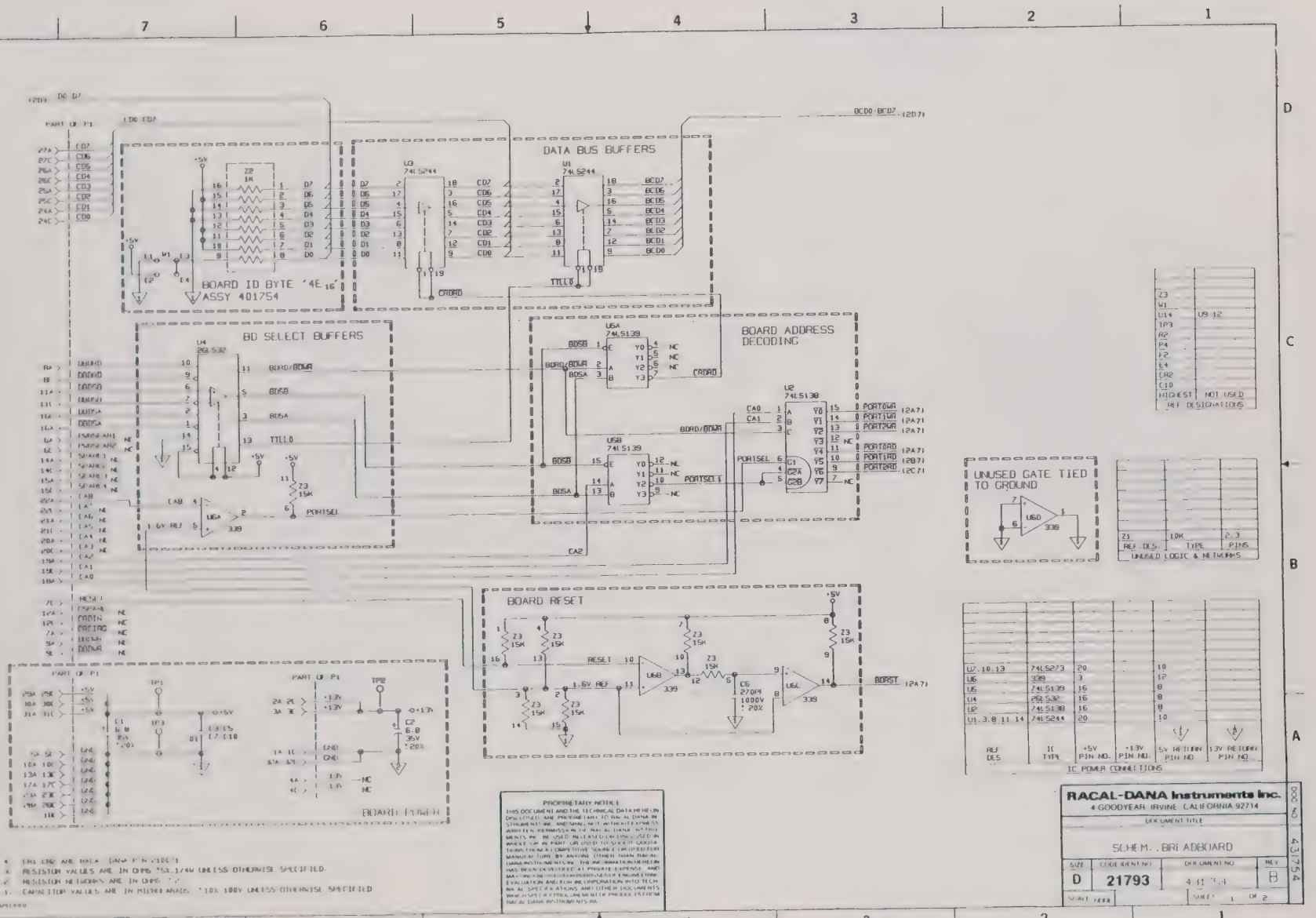
SCALE NONE | SHEET 1 OF 2


DATA BUS BUFFERS
BOARD ID BYTE '4E'16
ASSY 401754
BD SELECT BUFFERS
BOARD ADDRESS DECODING
UNUSED GATE TIED TO GROUND
BOARD RESET
BOARD POWER
PROPRIETARY NOTICE
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4 GOODYEAR IRVINE CALIFORNIA 92714
DOCUMENT TITLE
SCHEM. . BRI ADBOARD
SIZE
D
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21793
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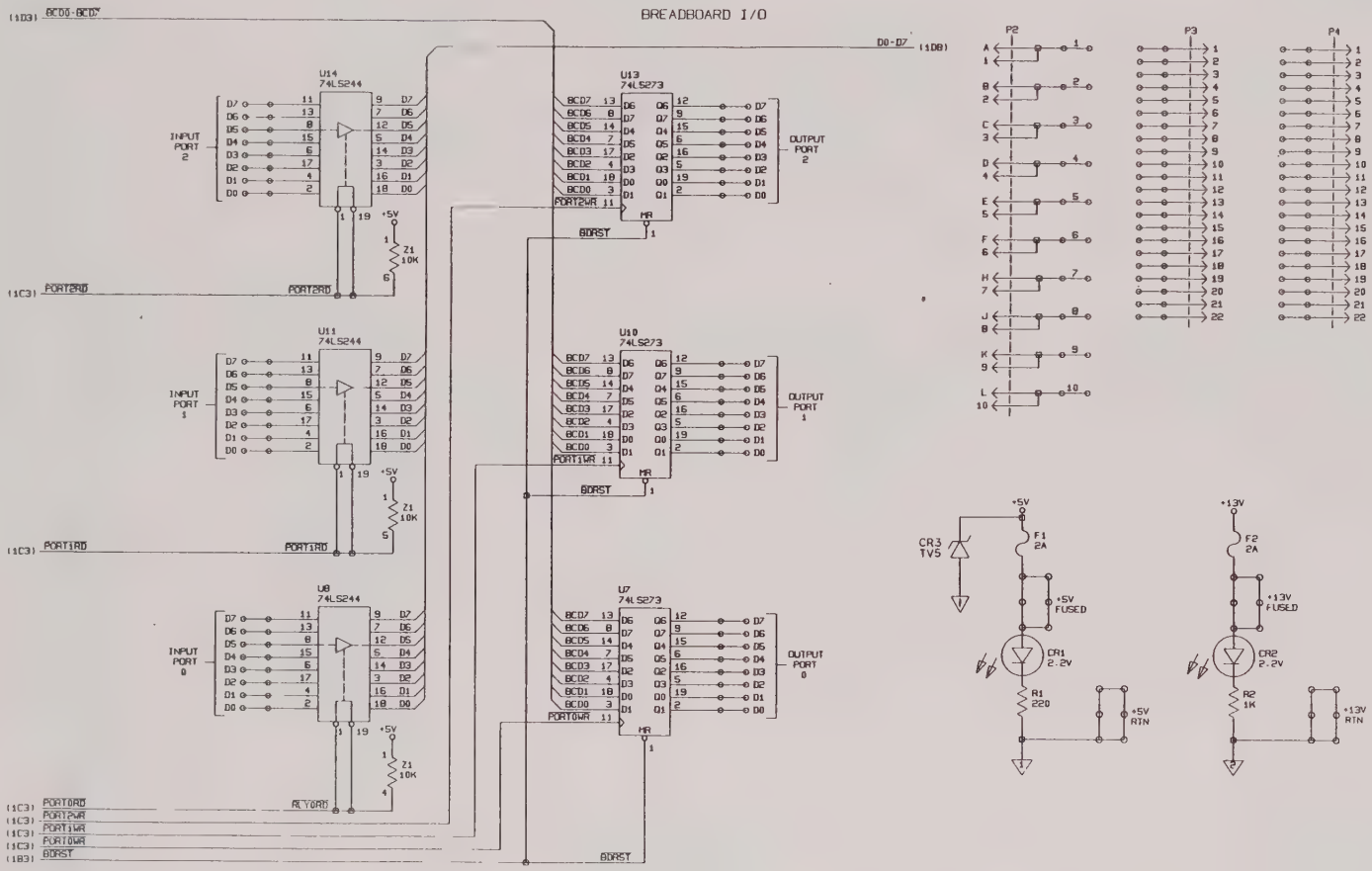
SHEET 1 OF 2
DWG NO 431754



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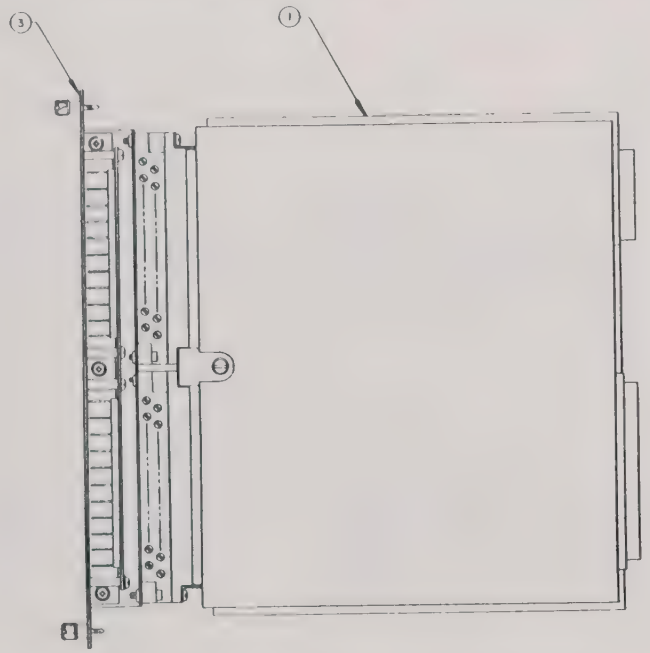
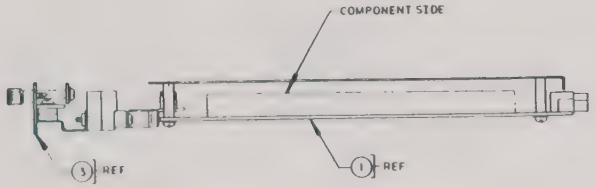
DOC NO 431754





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DOCUMENT TITLE
ACTUATOR ASSY, OPT. 12

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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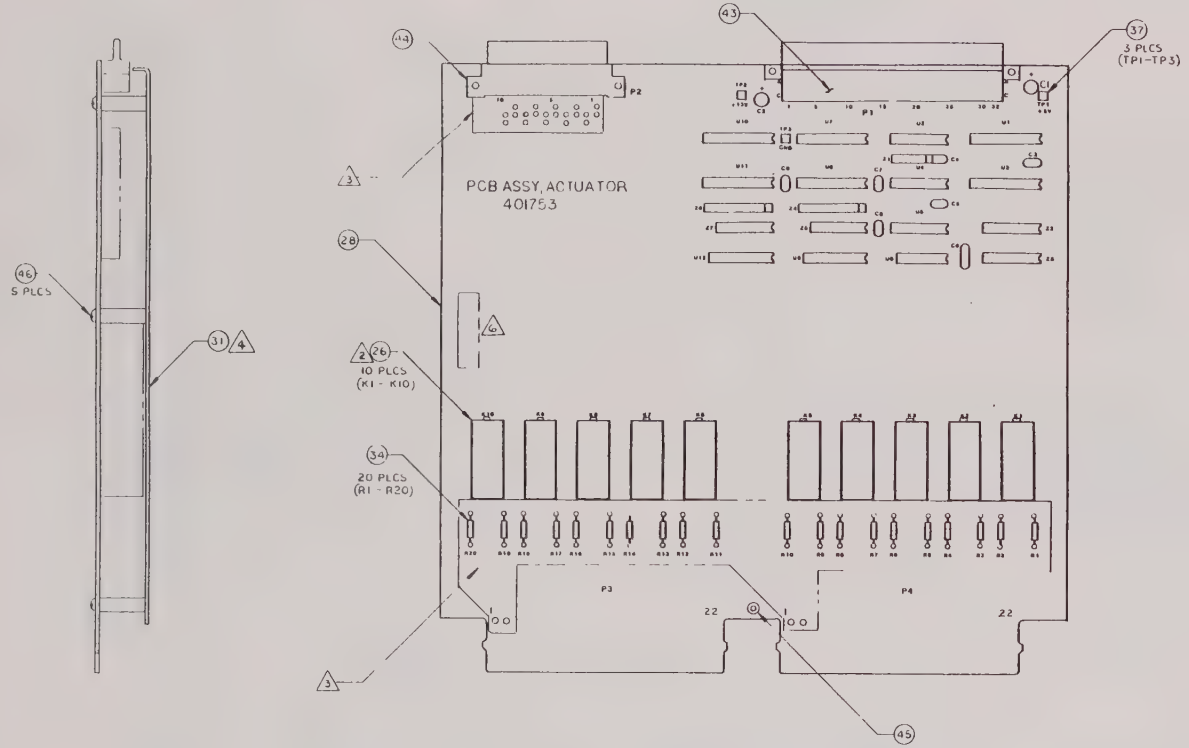
SCALE —— SHEET 1 OF 2

DOC NO 404448



6 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

5 PCB HANDLING TO CONFORM TO R/D 900325.

4 INSTALL SHIELD AFTER BOARD TEST.

3 HOLES IN THIS AREA MUST BE FREE TO SOLDER

2 CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE

1 REF. SCHEMATIC 431753

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DOCUMENT TITLE

PCB ASSY, ACTUATOR

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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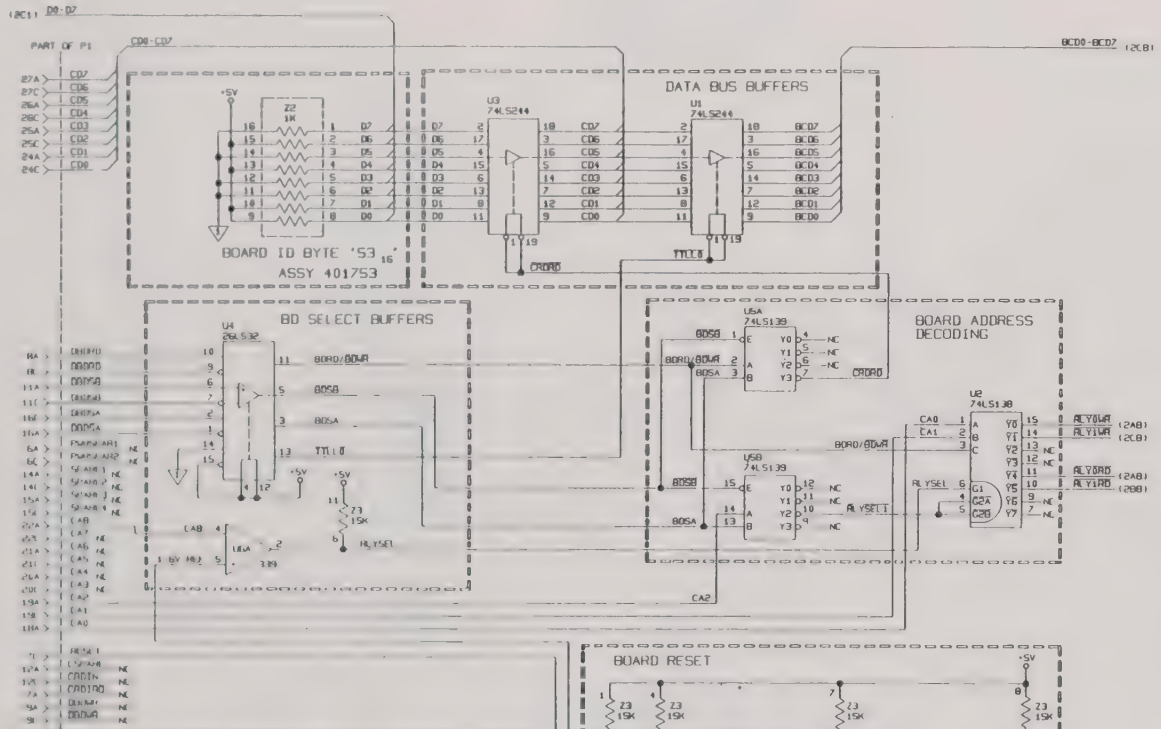

1. RELAYS K1 THRU K10 ARE RACAL DANA P/N 310170
   ALL RELAYS SHOWN IN DE-ENERGIZED POSITION
2. RESISTOR NETWORKS ARE IN OHMS ±2%
3. CAPACITOR VALUES ARE IN MICROFARADS ±10% 100V UNLESS OTHERWISE SPECIFIED

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4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE: SCHEM., ACTUATOR

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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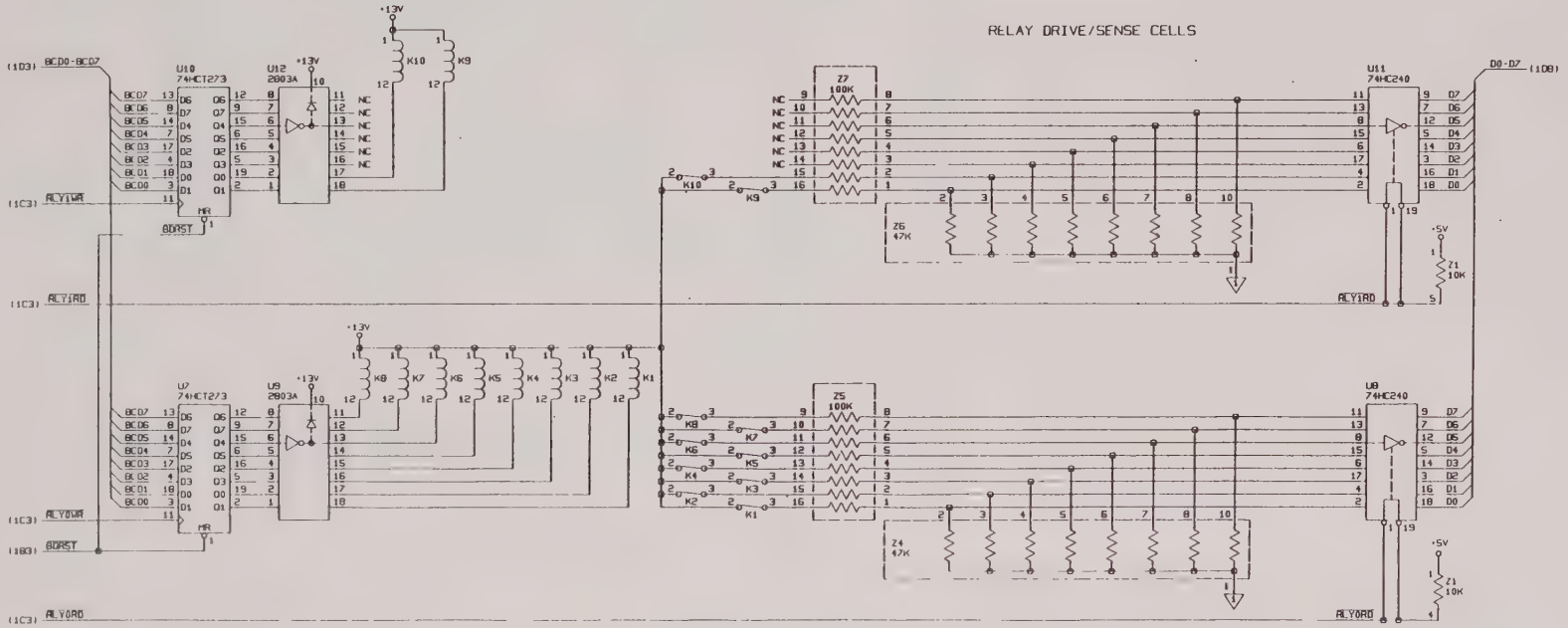
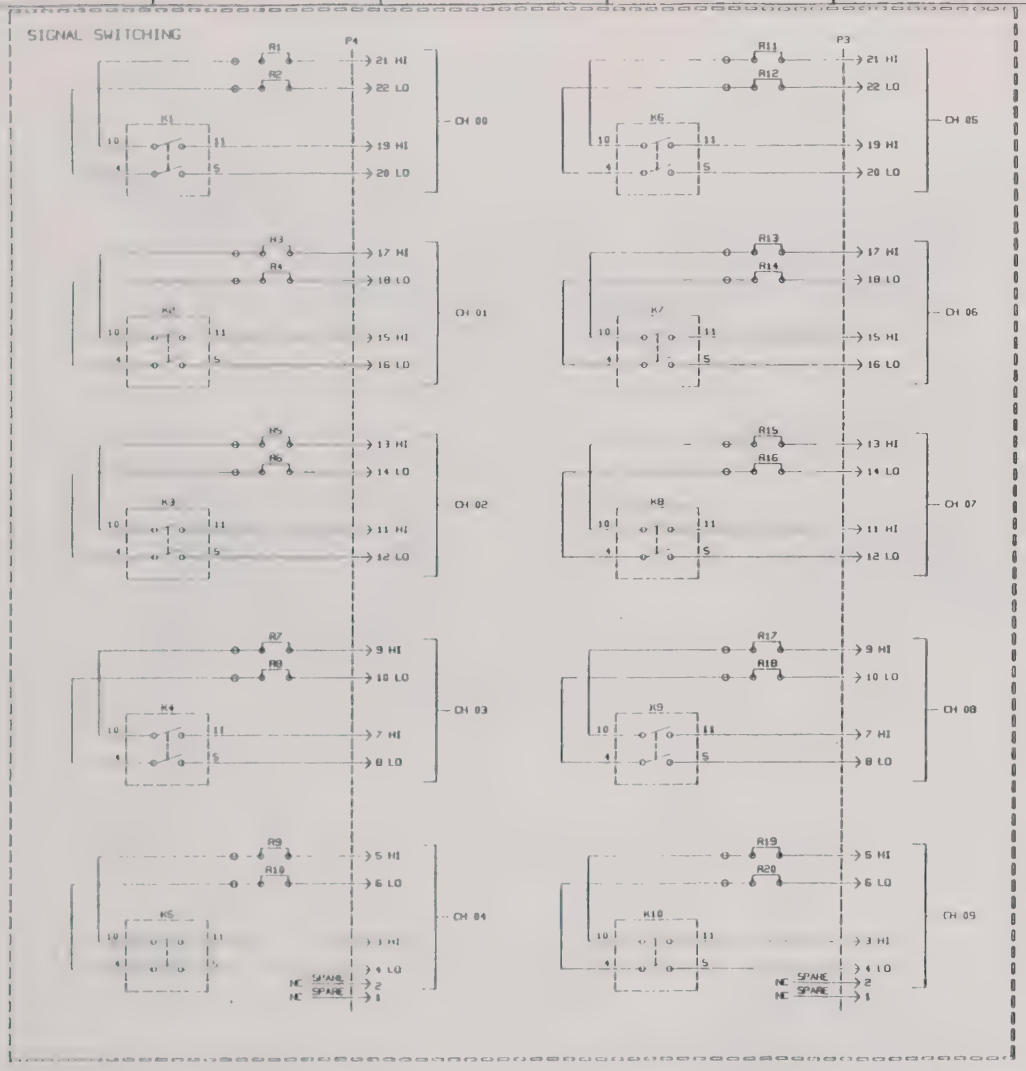
SCALE NONE SHEET 1 OF 3

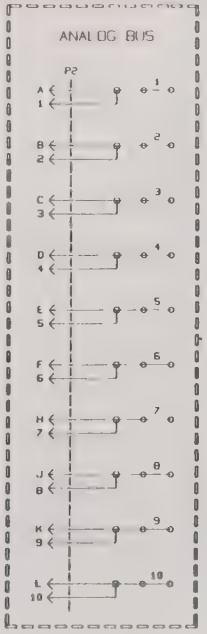
DOC NO 431753



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431753	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431753





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SCALE		SHEET 3 OF 3	

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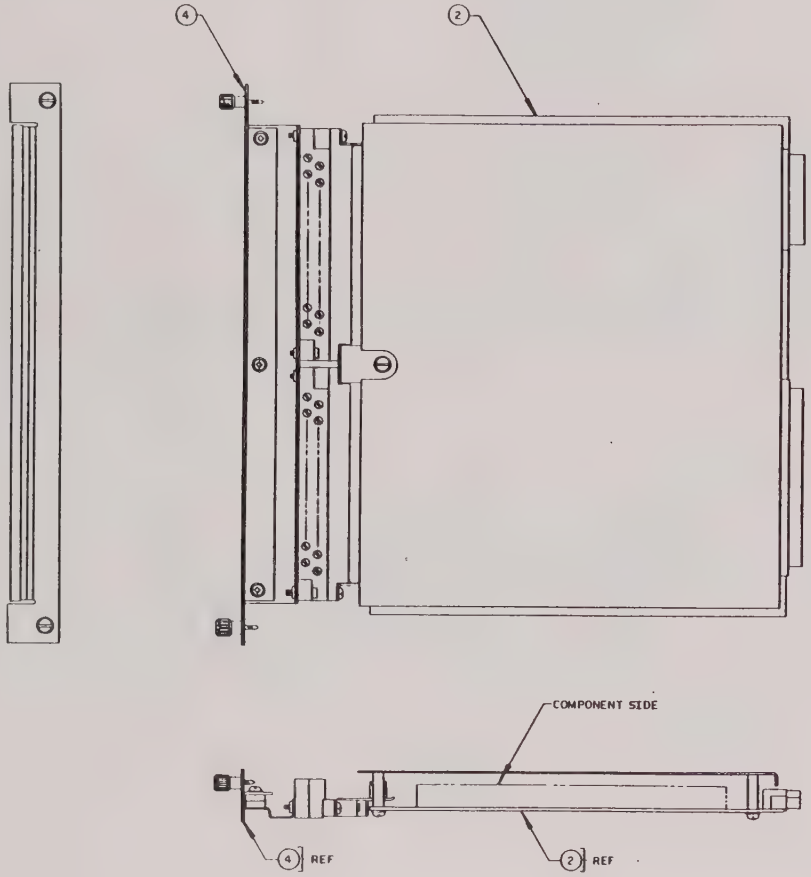

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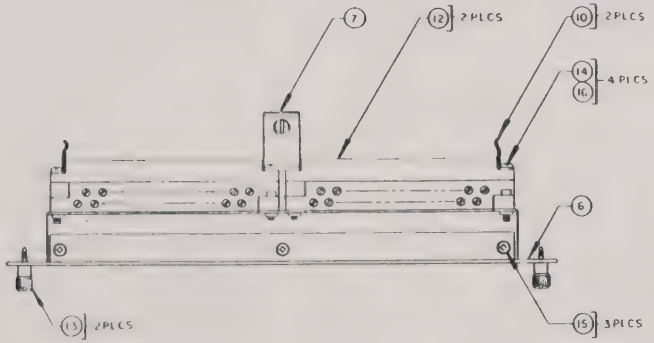
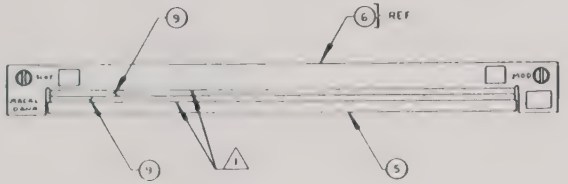
DOCUMENT TITLE
ACTUATOR ASSY, OTPL12

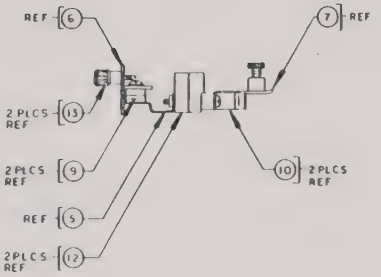
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404455	A

SCALE —— SHEET 1 OF 2

DOC NO 404455







1 APPLY ITEM 9 WITH ADHESIVE SIDE AT INDICATED POINTS.

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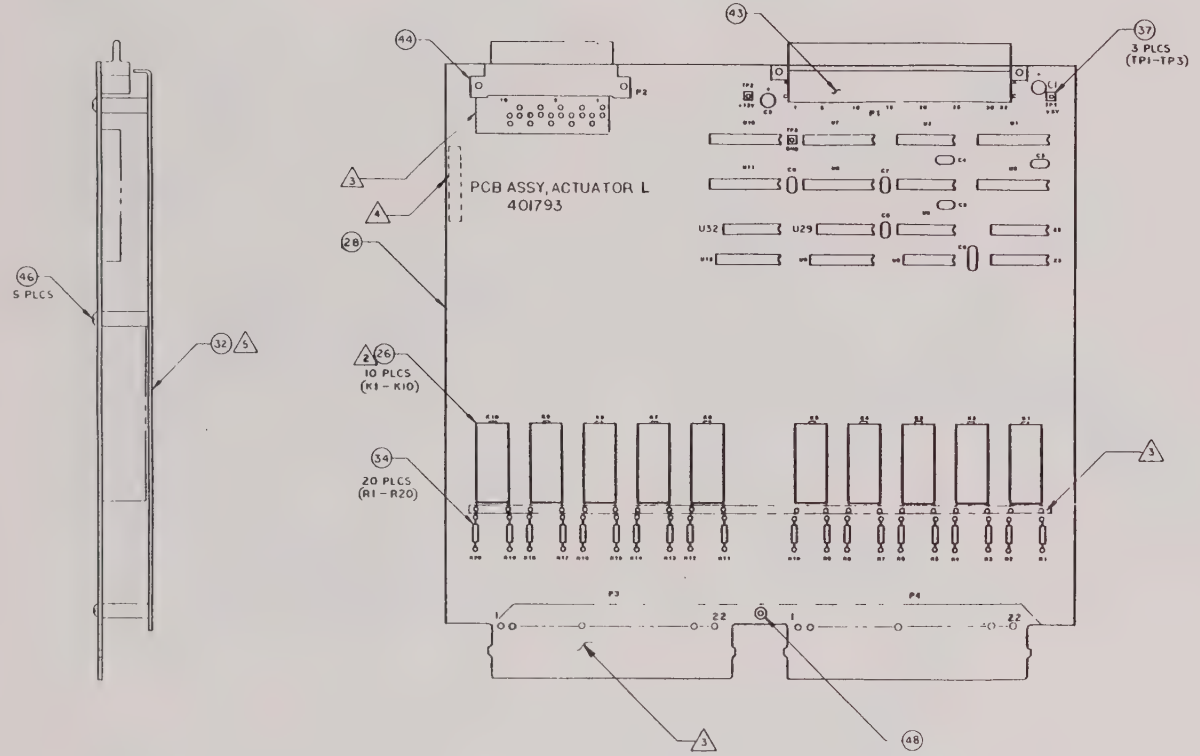
DOCUMENT TITLE
QD ASSY, TERMINAL

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404388	A

SCALE —— SHEET 1 OF 2

404388



(5) SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY

(4) INK STAMP SERIAL NO APPROX WHERE SHOWN, COMP. SIDE

(3) HOLES IN THIS AREA MUST BE FREE FROM SOLDER.

(2) CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE

1 REF. SCHEMATIC 431793

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DOCUMENT TITLE

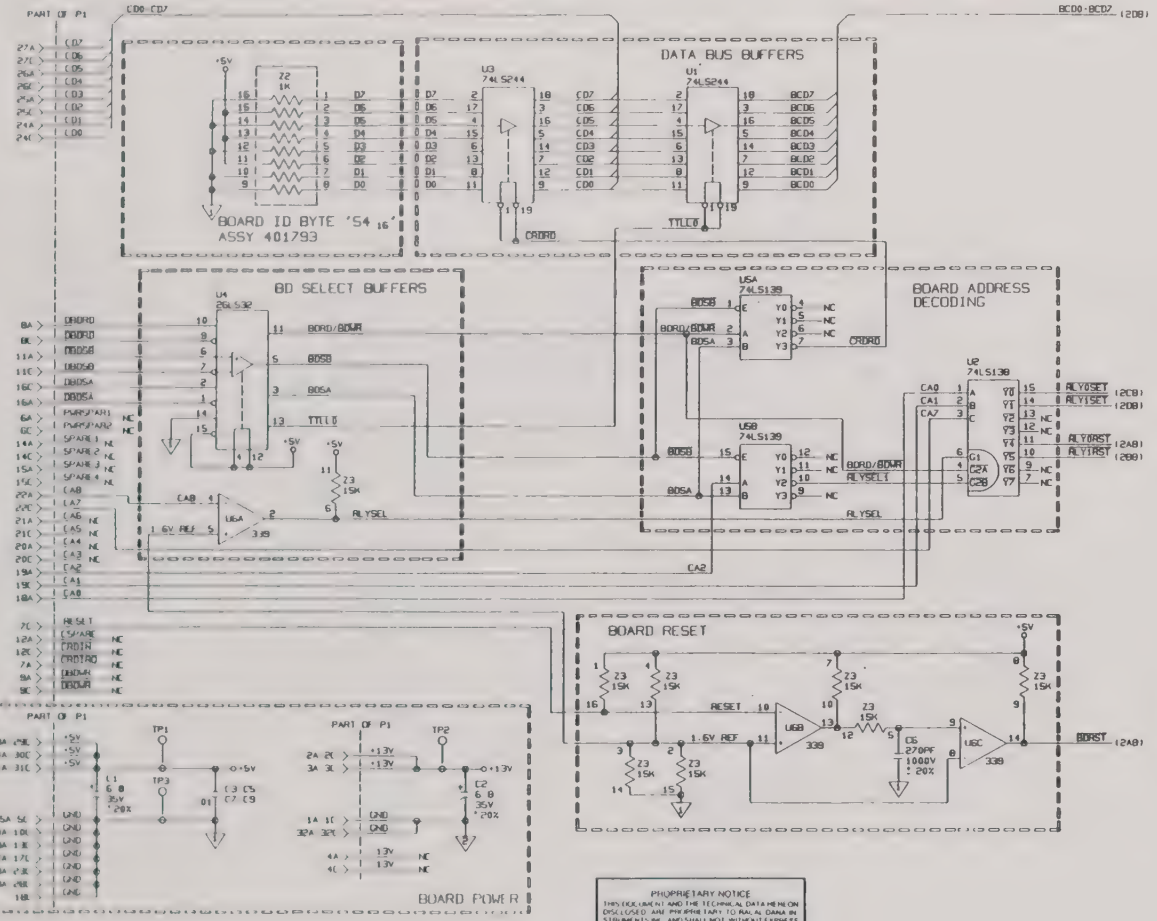
PCB ASSY, ACTUATOR L

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401793	A

SCALE NONE | SHEET 1 OF 3

401793

6-15



3 RELAYS K1 THRU K10 ARE RACAL DANA P/N 310181
ALL RELAYS SHOWN IN DE ENERGIZED POSITION
2 RESISTOR NETWORKS ARE IN OHMS ±2%.
1. CAPACITOR VALUES ARE IN MICROFARADS ±10% 100V UNLESS OTHERWISE SPECIFIED

NOTES UNLESS OTHERWISE SPECIFIED

U9,12,29,32	2803A		10		9
U7,8,10,11	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	
REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.

Z3	Z1	
U32	U13 14 15 16	
	17 18 19 20	
	21 22 23 24	
	25 26 27 28	
	30 31	
TP3		
R20		
P4		
K10		
C9		
HIGHEST	NOT USED	

REF. DESIGNATIONS

REF. DES.	TYPE	PINS

UNUSED LOGIC & NETWORKS

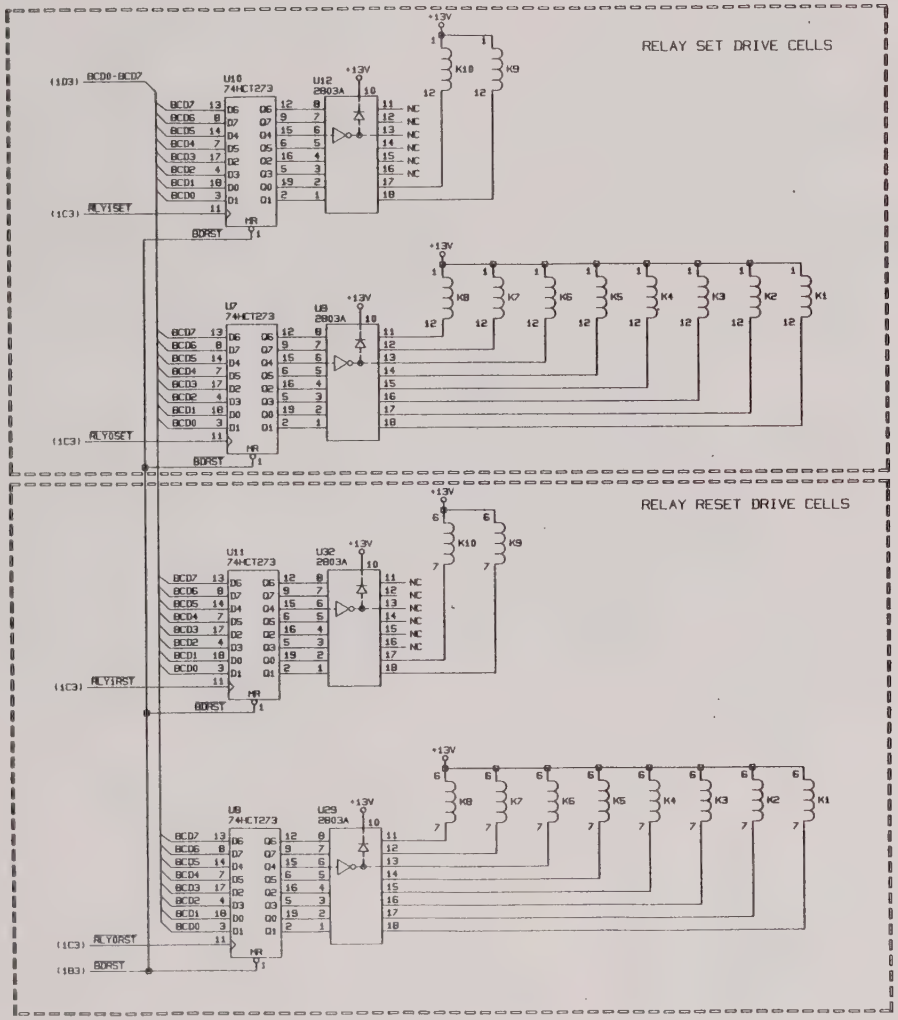
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE
SCHEM. . ACTUATOR LTCH

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431793	A

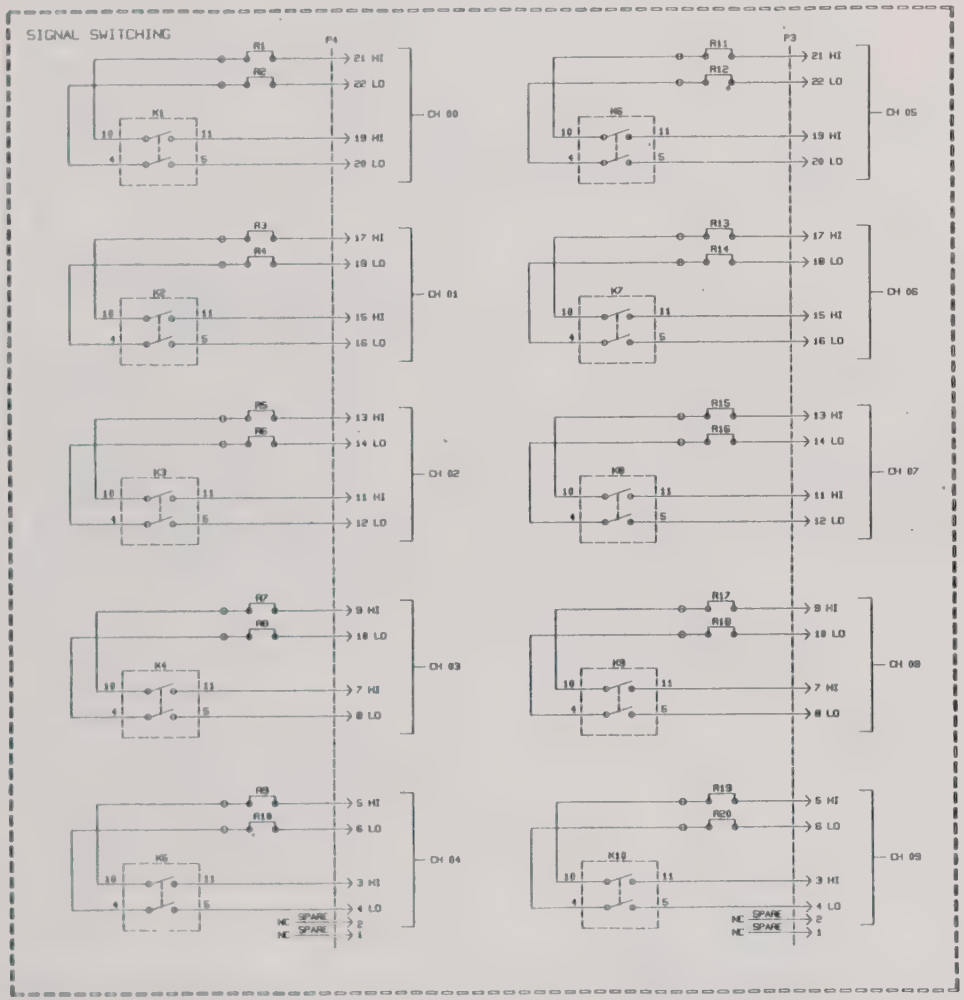
SCALE NONE SHEET 1 OF 2

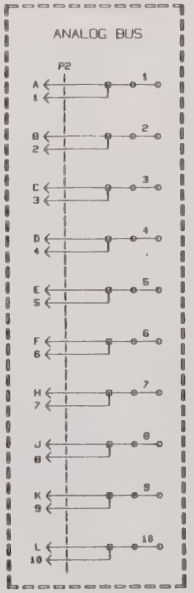
300 04 4/15/83



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431793	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431793





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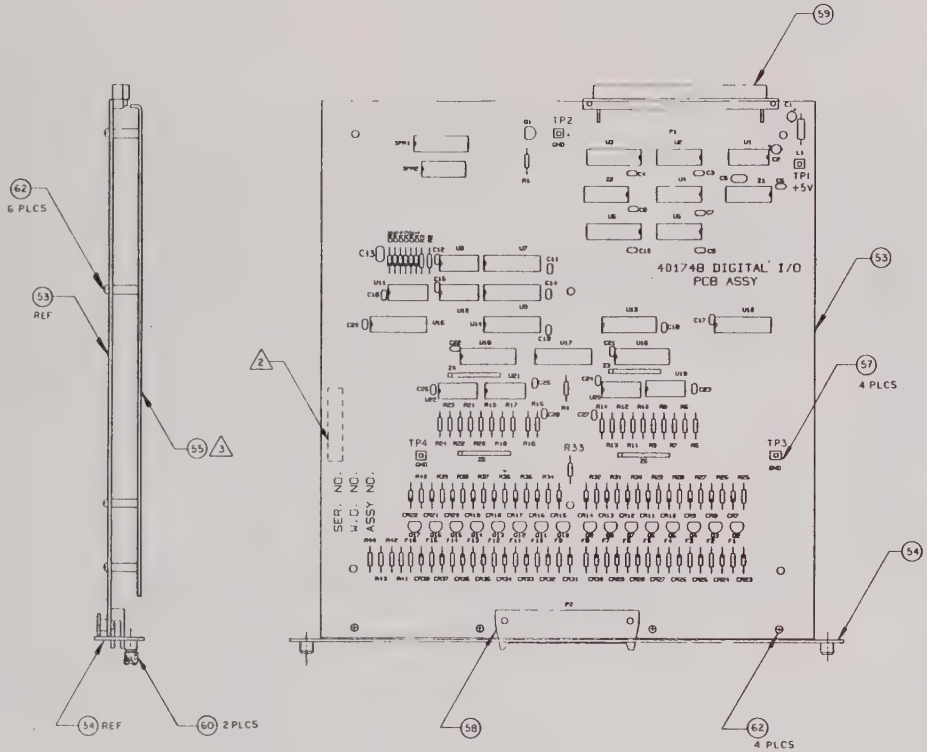
D	21793	431793	A
SCALE		SHEET 3 OF 3	

DOC NO 431793



3 SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY

2 INK STAMP SERIAL NO APPROX WHERE SHOWN, COMP SIDE

1 REF SCHEMATIC 421746

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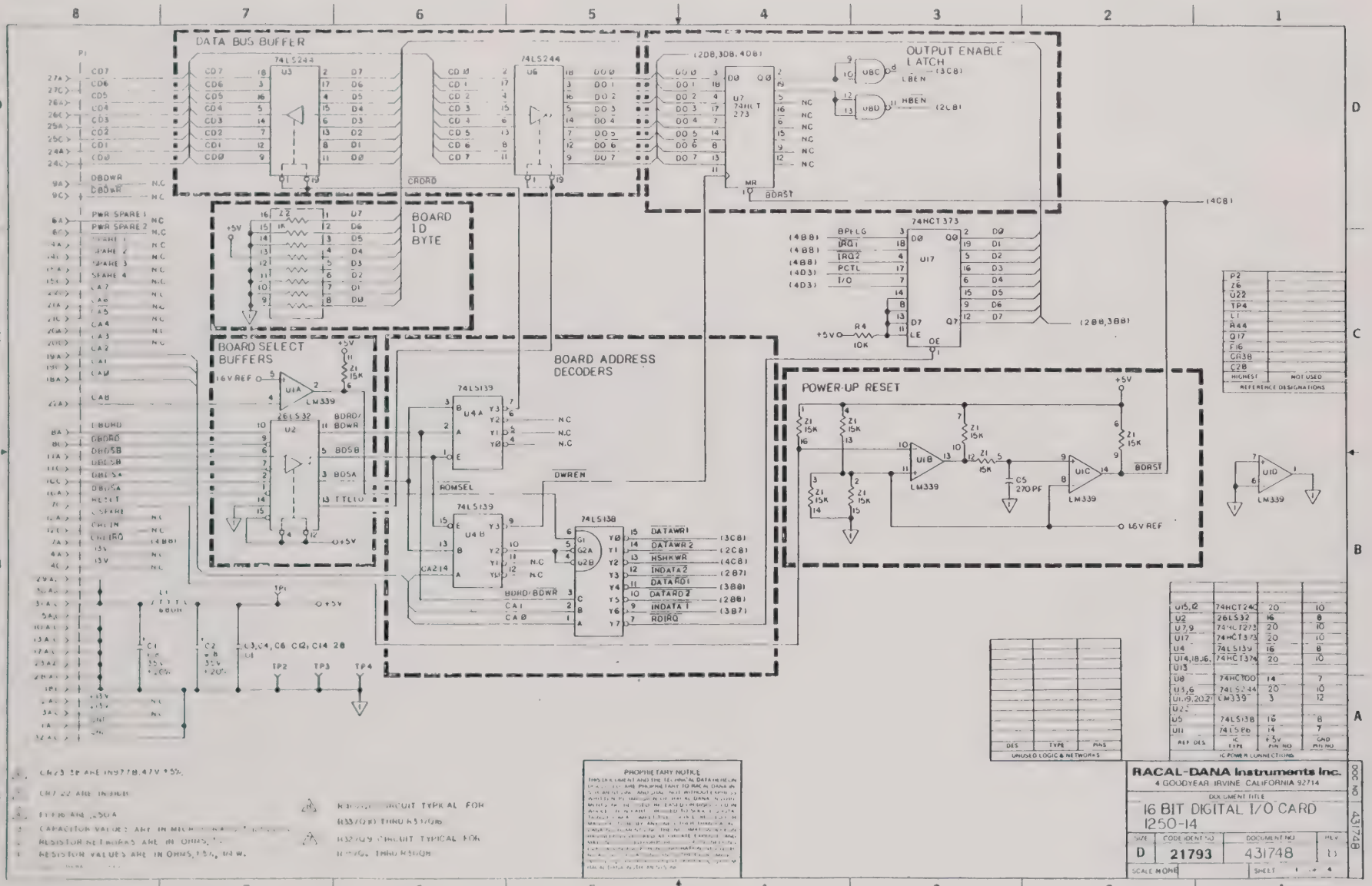
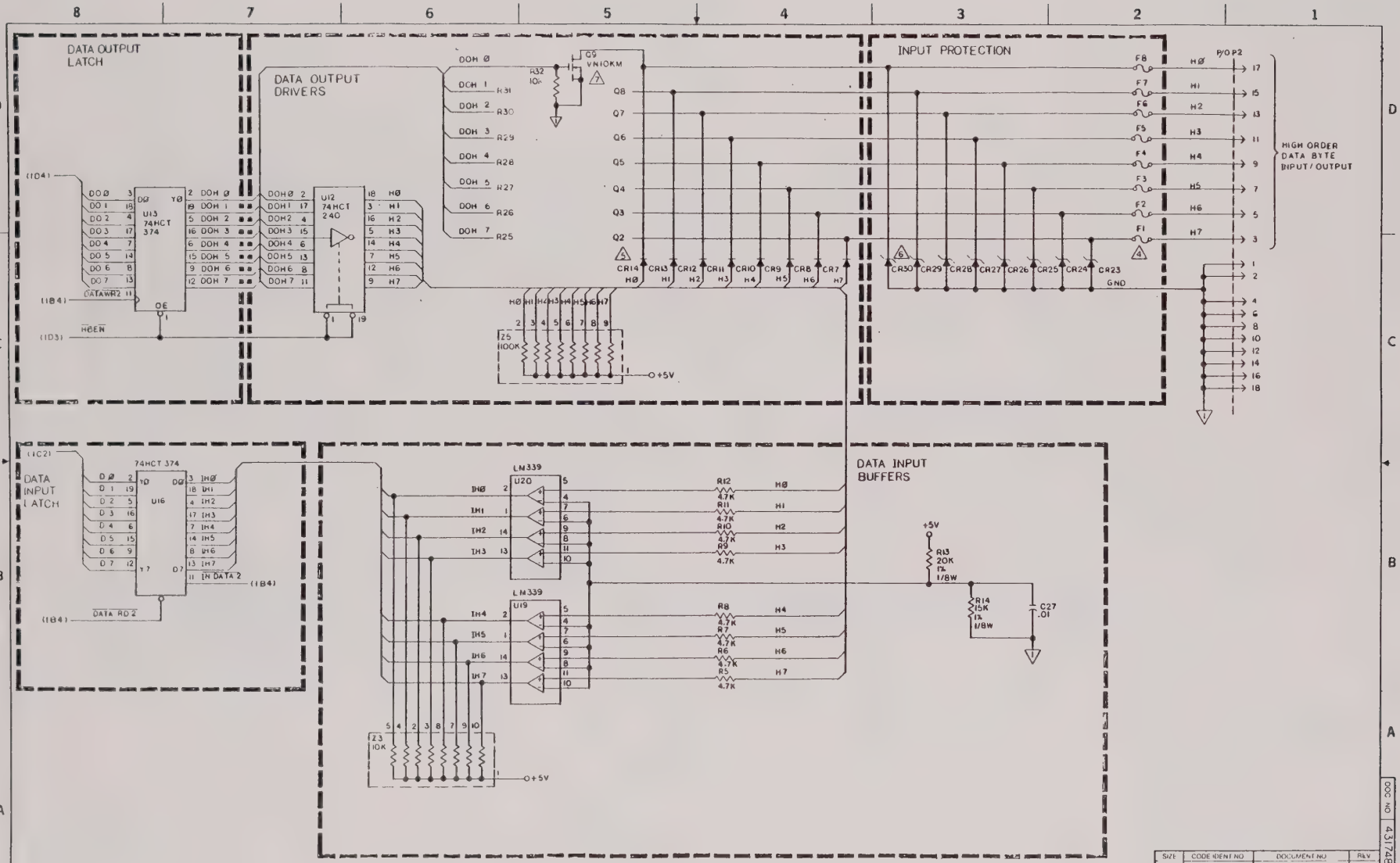
RACAL-DANA Instruments Inc.		
4 GOODYEAR IRVINE CALIFORNIA 92714		
DOCUMENT TITLE: PCB ASSY, DIGIT. I/O		
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 401748
REV: D	SCALE: —	SHEET 1 OF 4
DOC NO: 401748		


DATA BUS BUFFER
74LS244
74LS244
OUTPUT ENABLE LATCH
(208,308,408)
74HCT 373
BOARD ID BYTE
BOARD SELECT BUFFERS
BOARD ADDRESS DECODERS
74LS139
74LS139
74LS138
26LS32
LM339
POWER-UP RESET
+5V
+16V REF
-16V REF
CARD
BDRST
DWREN
ROMSEL
DATAWR1
DATAWR2
MSHKWR
INDATA2
DATARD1
DATARD2
INDATA1
RDIRQ
BDRD/BDWR
BDSB
BDSA
TTLCLO
N.C
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714
16 BIT DIGITAL I/O CARD
1250-14
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431748
REV D
SCALE NONE
SHEET 1 OF 4
DOC NO 431748



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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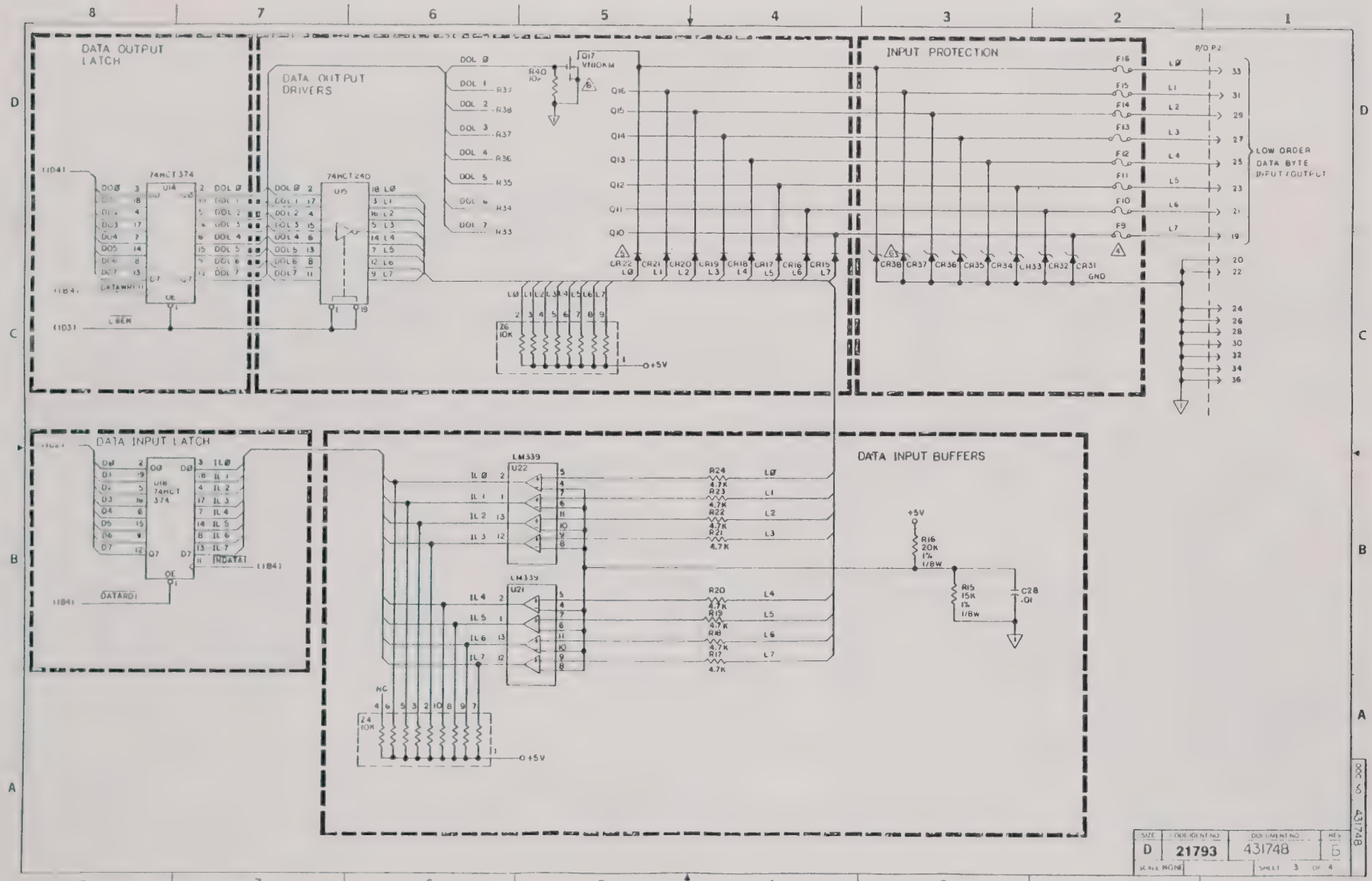
SCALE NONE		SHEET 2 OF 4	

DOC NO 431748



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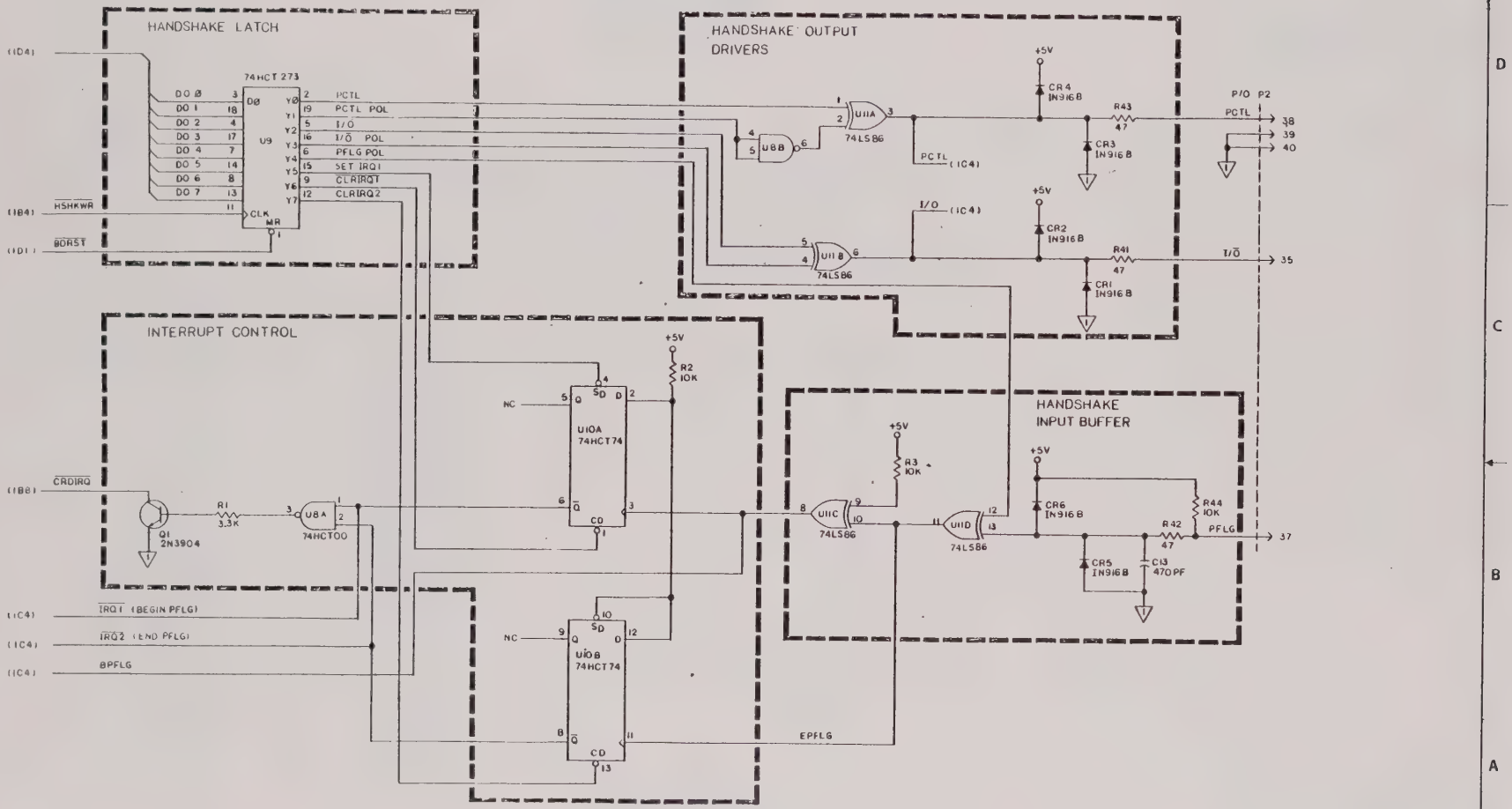
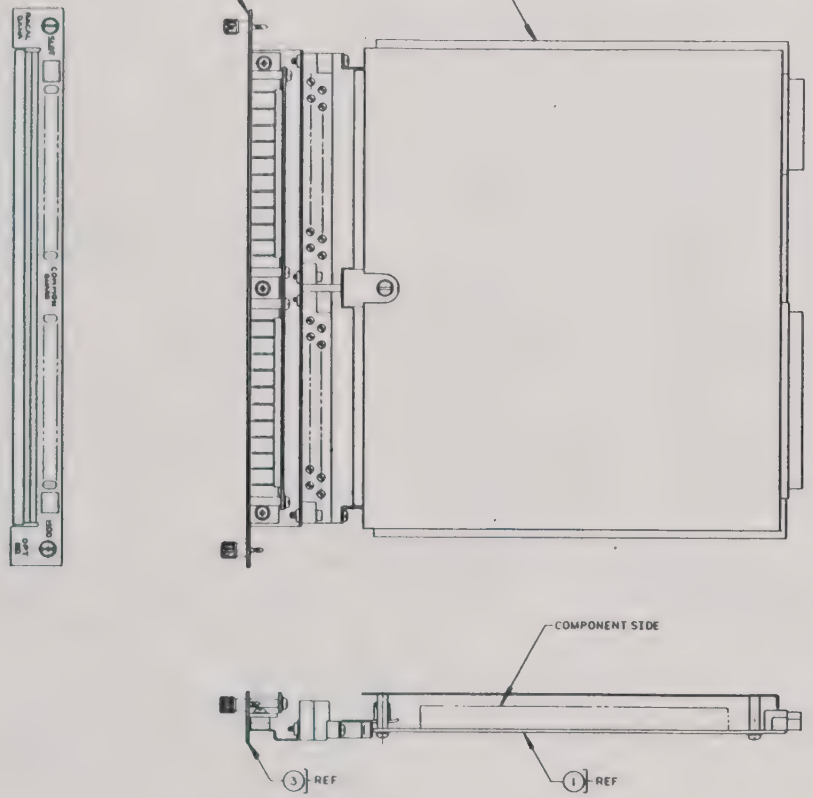
SCALE NONE SHEET 3 OF 4

DOC NO 431748



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431748	B
SCALE NONE		SHEET 4 OF 4	

DOC NO 431748



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RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE: RLY DRVR ASSY, OPT. 15

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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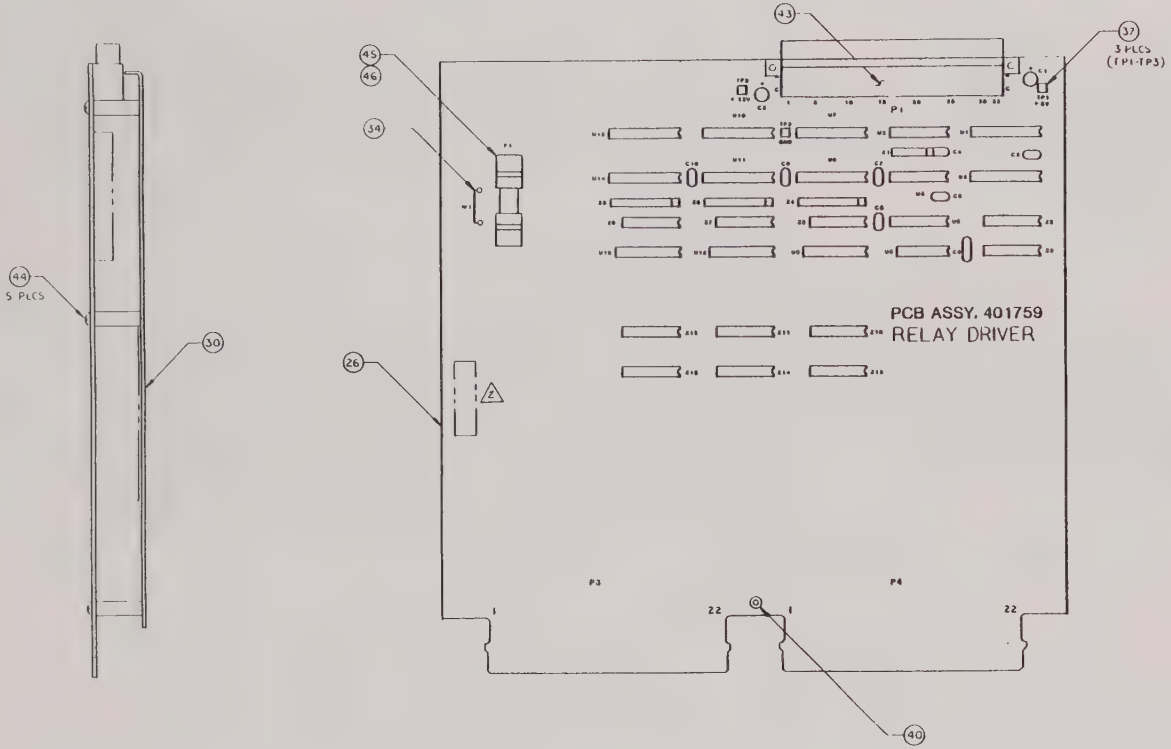
SCALE —— SHEET 1 OF 2

DOC NO 404446



2 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

1. REF SCHEMATIC 431759
NOTED UNLESS OTHERWISE SPECIFIED

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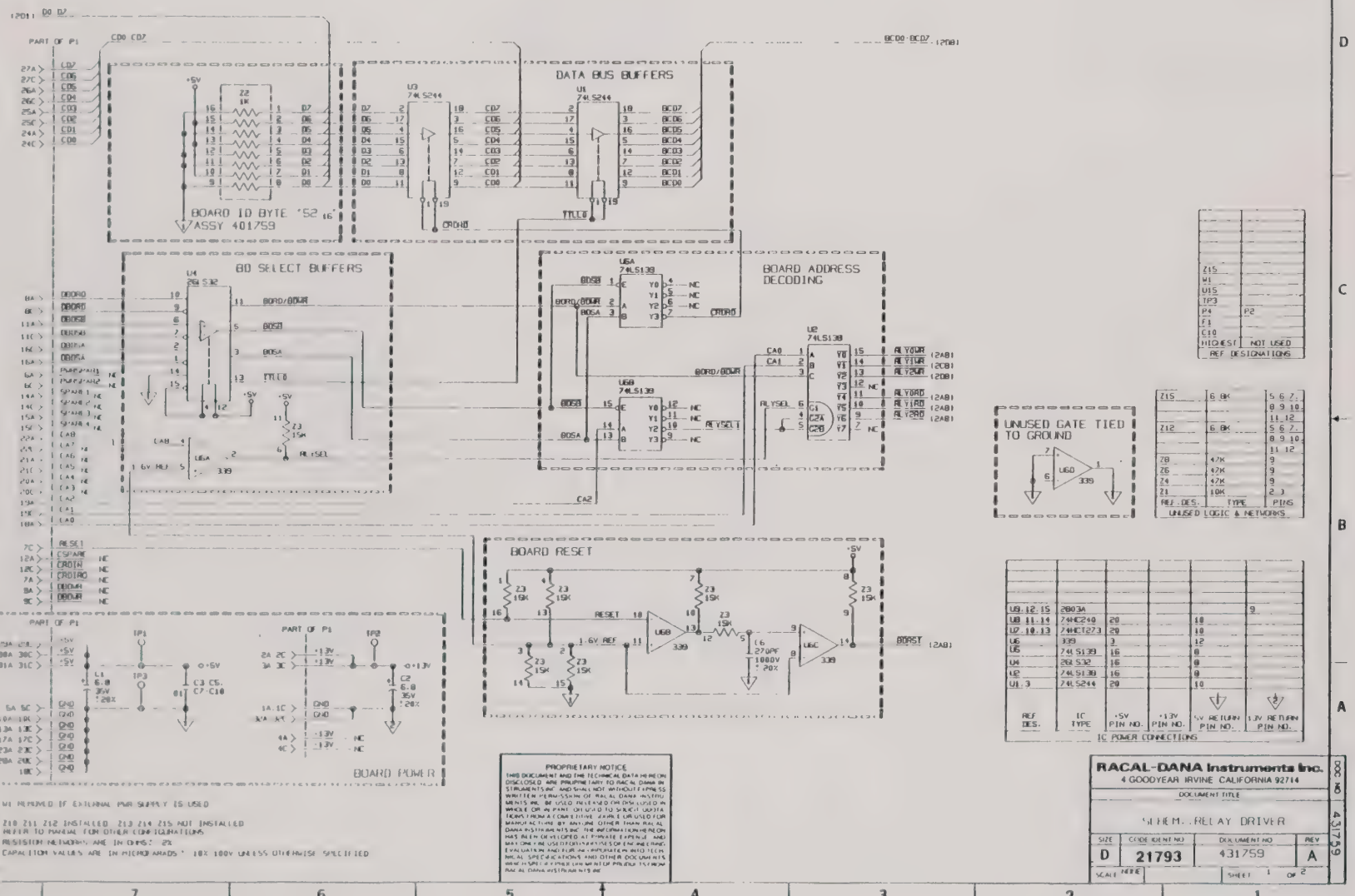
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

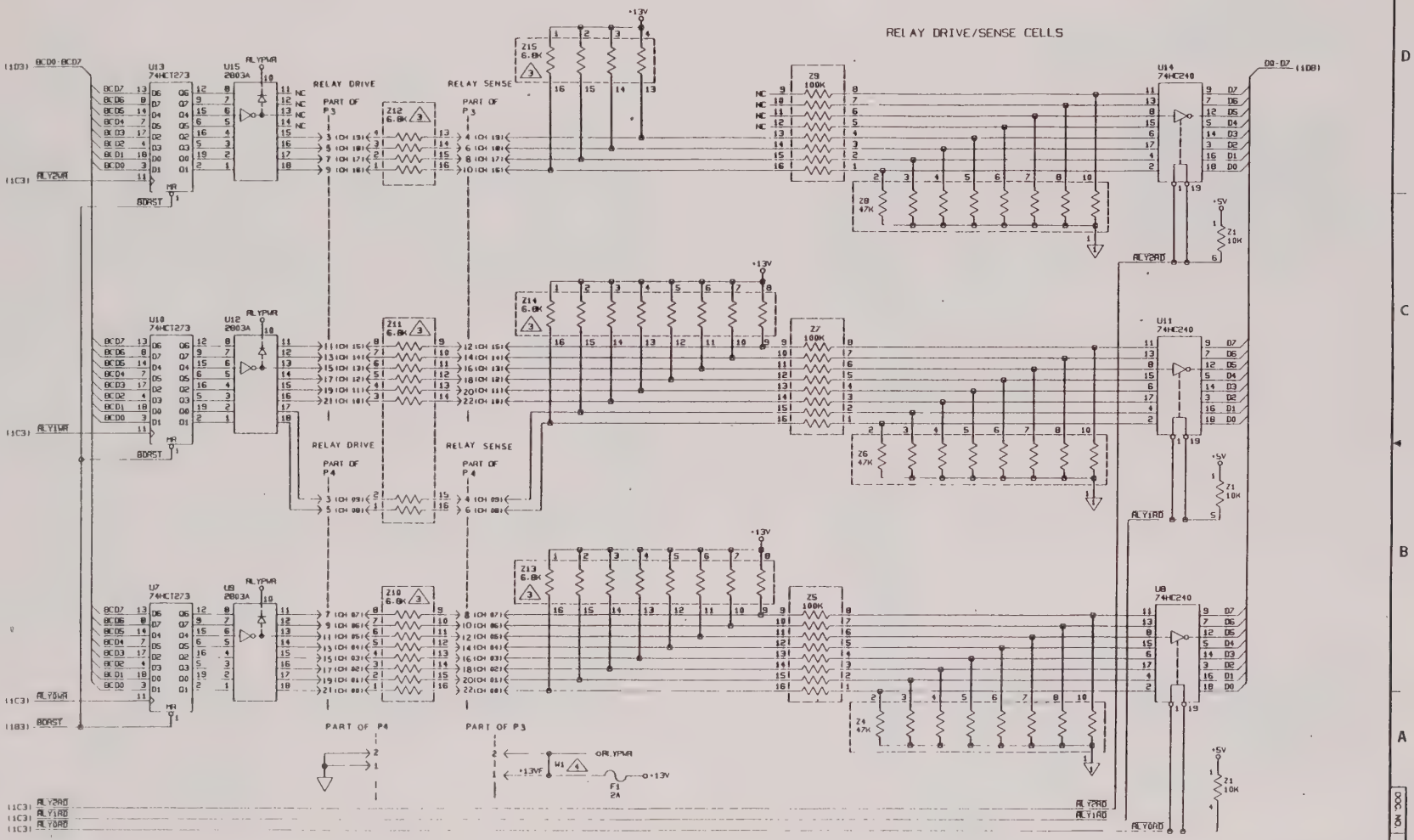
DOCUMENT TITLE
PCB ASSY, RELAY DRIVER

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401759	E

SCALE None | SHEET 1 OF 3

DOC NO 401759


DATA BUS BUFFERS
BOARD ID BYTE '52 16'
ASSY 401759
BD SELECT BUFFERS
BOARD ADDRESS DECODING
UNUSED GATE TIED TO GROUND
BOARD RESET
BOARD POWER
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714
SCHEM., RELAY DRIVER
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431759
REV A
SCALE NONE
SHEET 1 OF 2
IC POWER CONNECTIONS
UNUSED LOGIC & NETWORKS
REF DESIGNATIONS



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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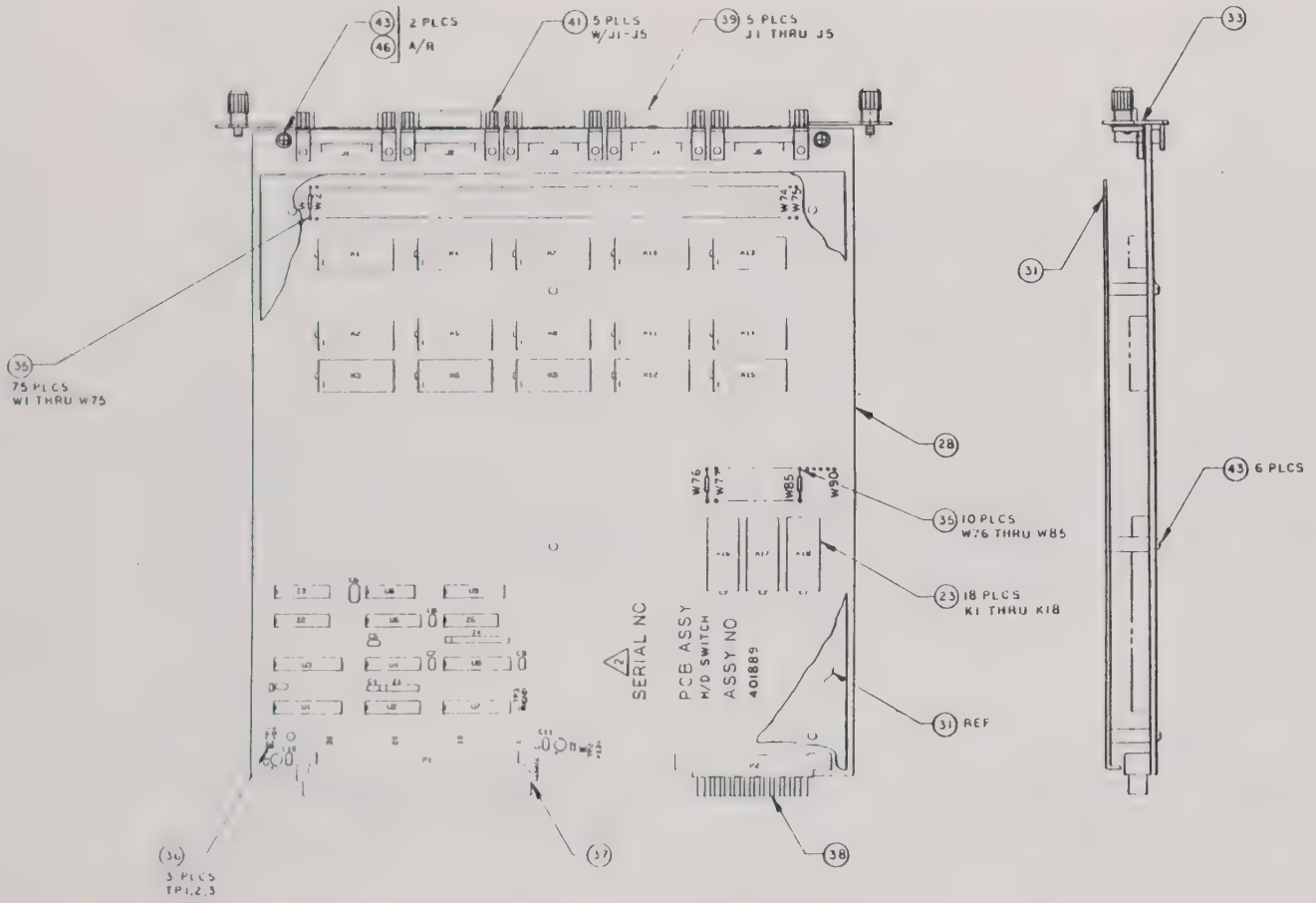
SCALE NONE		SHEET 2 OF 2	

DOC NO 431759



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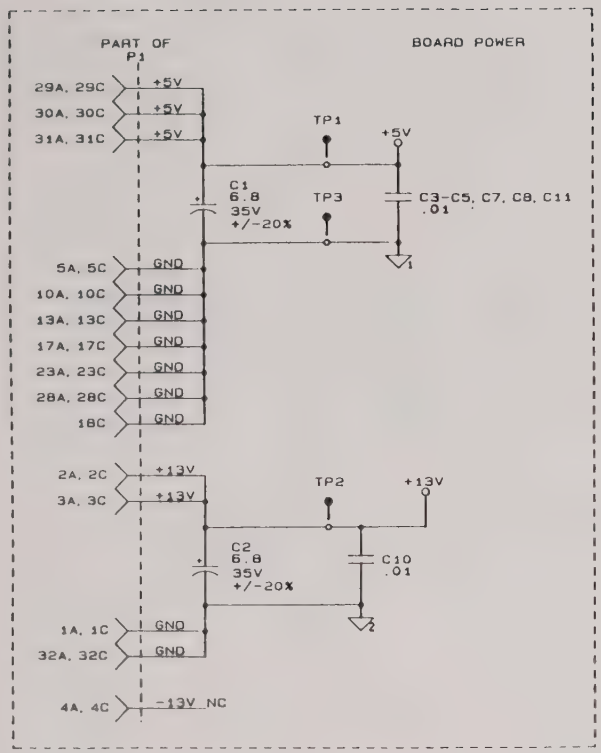
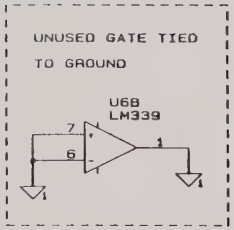
RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, H/D SWITCH			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401889	A
SCALE 1:1		SHEET 1 OF 2	

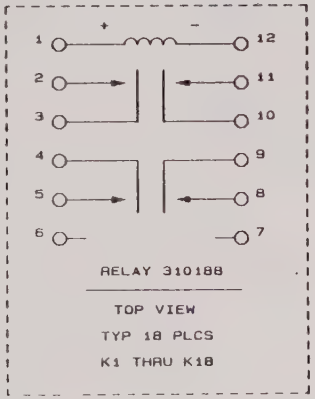
OPTION 16

2 INK STAMP SERIAL NUMBER, ASSEMBLY NAME & NUMBER ON COMPONENT SIDE APPROX WHERE SHOWN

1 REFERENCE SCHEMATIC 431889







REF. DES.	IC TYPE	+5V PIN NO.	+12V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9	2981		10		9
U8	74HC240	20		10	
U7	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

Z5
W90
U9
TP3
P2
K18
J5
E8
C11
HIGHEST REF. DES.

3. RELAYS K1 THRU K18 ARE RACAL-DANA P/N 310188. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
2. RESISTOR NETWORKS ARE IN OHMS, +/-2%.
1. CAPACITOR VALUES ARE IN MICROFARADS, +/-10%, 100V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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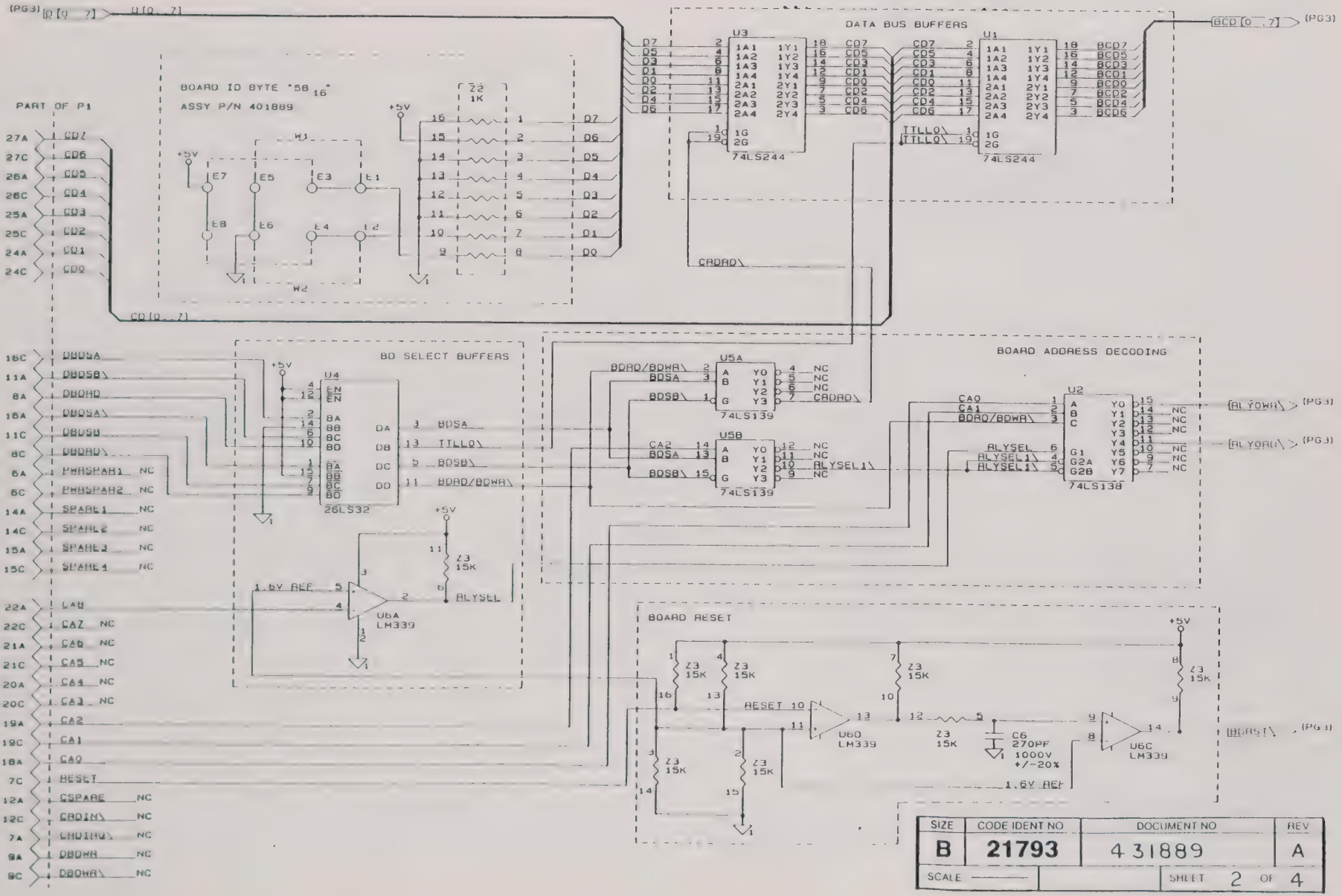
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

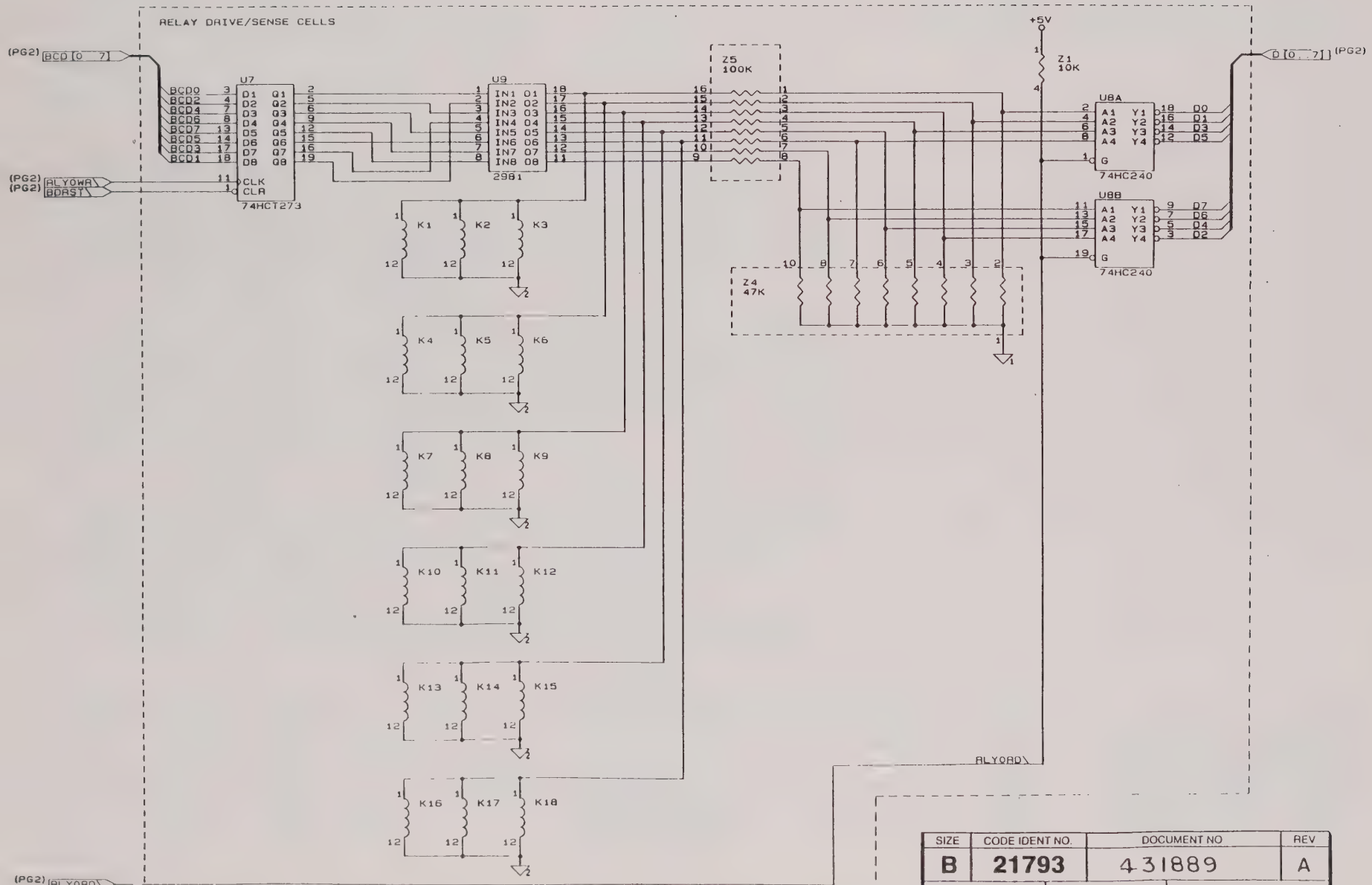
SCHEM., H/D SWITCH

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	4-31889	A

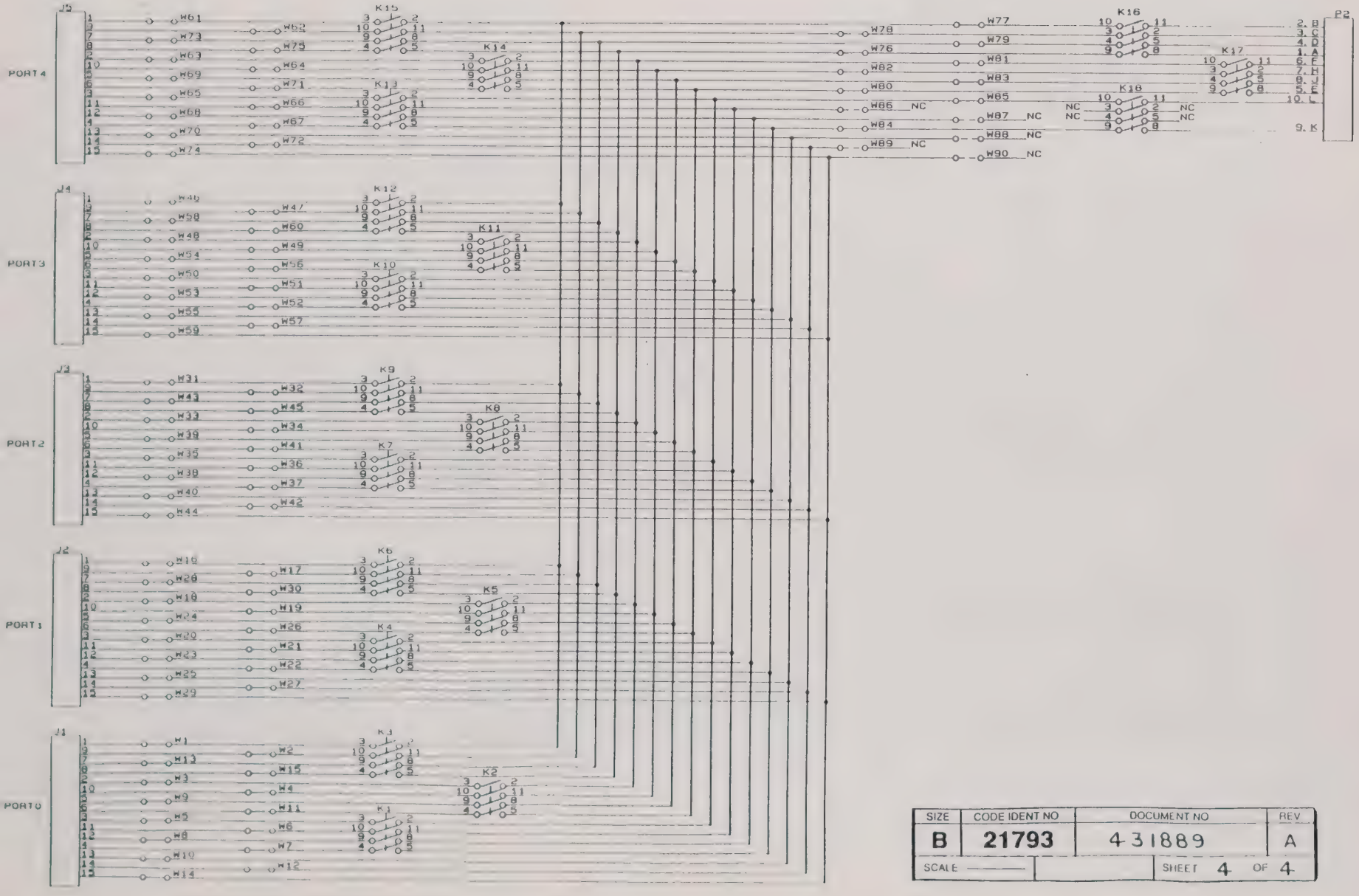
SCALE ——— SHEET 1 OF 4



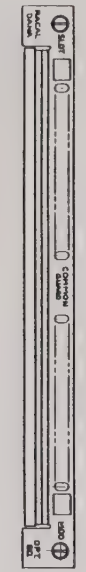
SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431889	A
SCALE		SHEET 2 OF 4	

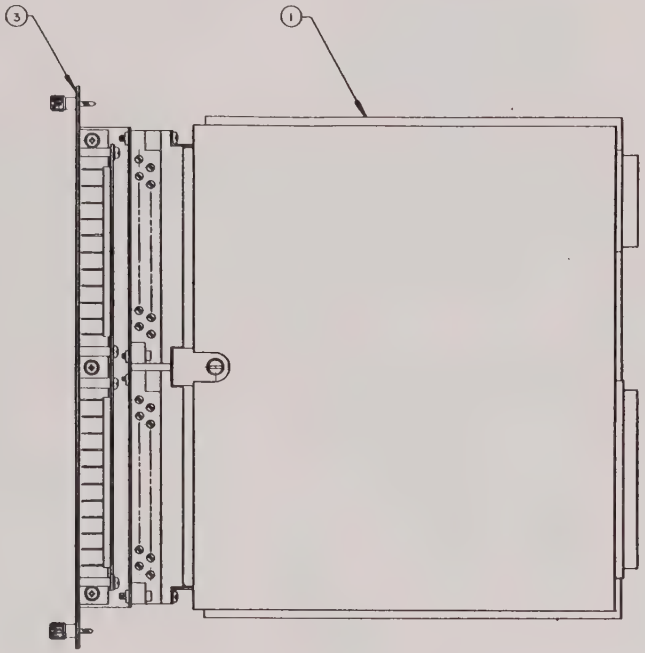


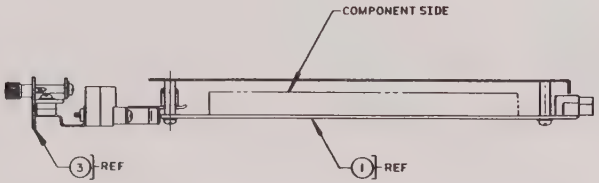
SIZE	CODE IDENT NO.	DOCUMENT NO	REV
B	21793	431889	A
SCALE		SHEET 3 OF 4	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431889	A
SCALE		SHEET 4 OF 4	







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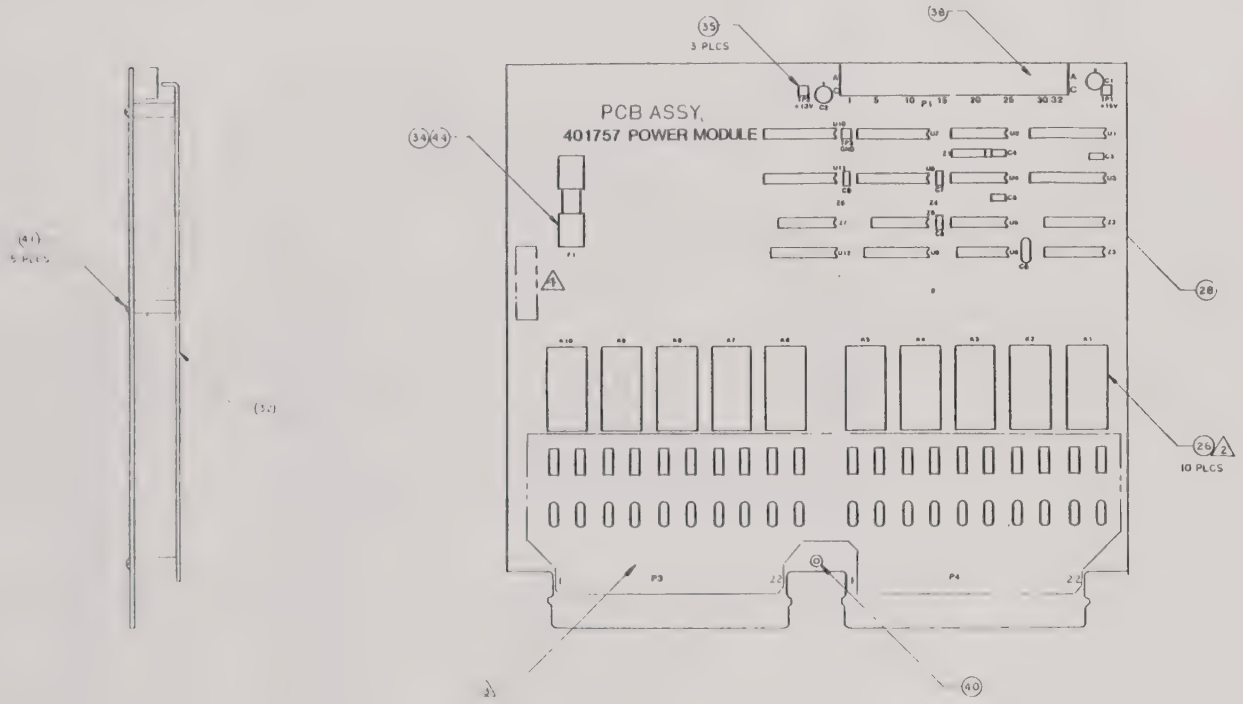
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: PWR MOD ASSY, OPT. 20

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404445	A

SCALE — SHEET 1 OF 2

DOC NO 404445



4 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

3 HOLES IN THIS AREA MUST BE FREE TO SOLDER

2 CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLORETHANE

1 REF SCHEM 431757

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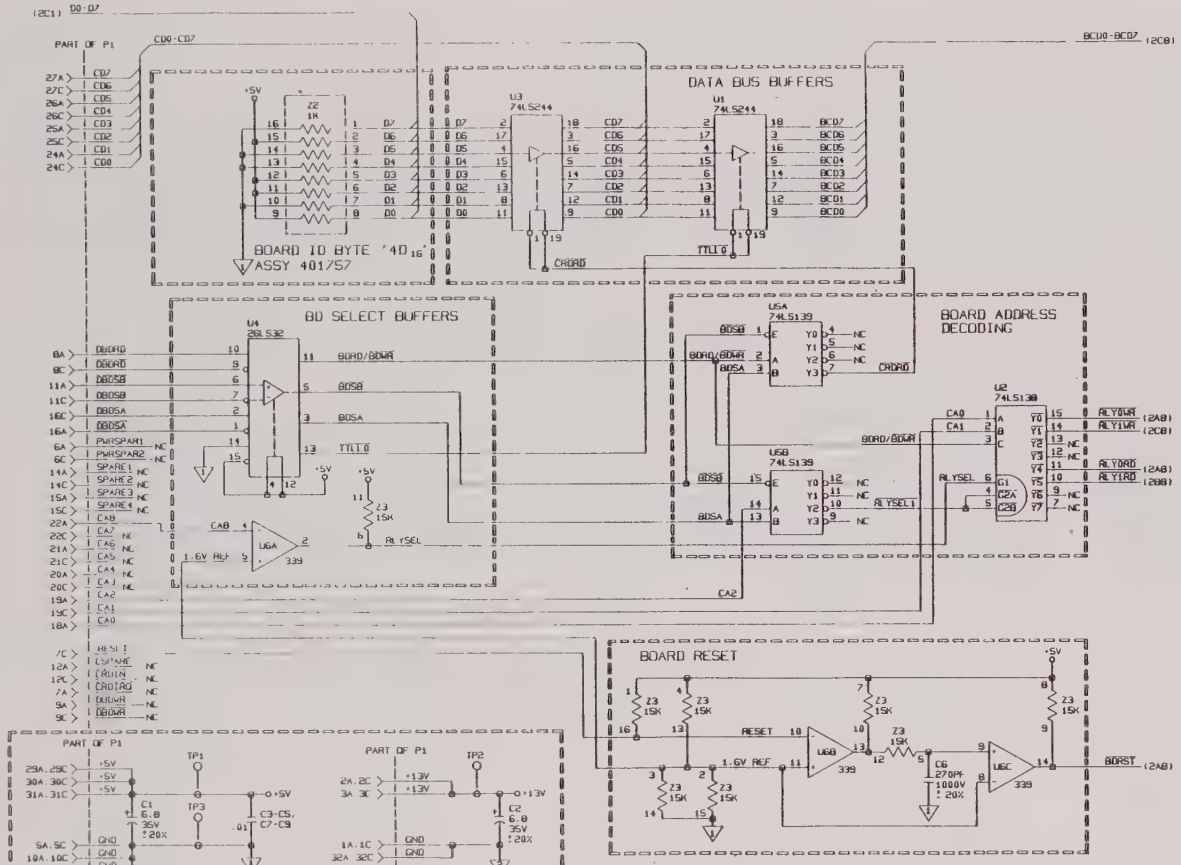
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714

DOCUMENT TITLE: PCB ASSY, POWER MODULE

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401757	C

SCALE NONE | SHEET 1 OF 3

DO NOT SCALE


DATA BUS BUFFERS
BOARD ID BYTE '4D16'
ASSY 401757
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
RELAY TOP VIEW
TYP 10 PLCS
K1-K10
UNUSED GATE TIED TO GROUND
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REF. DESIGNATIONS	
Z7	
U12	
TP3	
P4	P2
K10	
F1	
C9	
HIGHEST	NOT USED

UNUSED LOGIC & NETWORKS		
REF. DES.	TYPE	PINS
Z6	47K	9
Z4	47K	9
Z1	10K	2,3,6

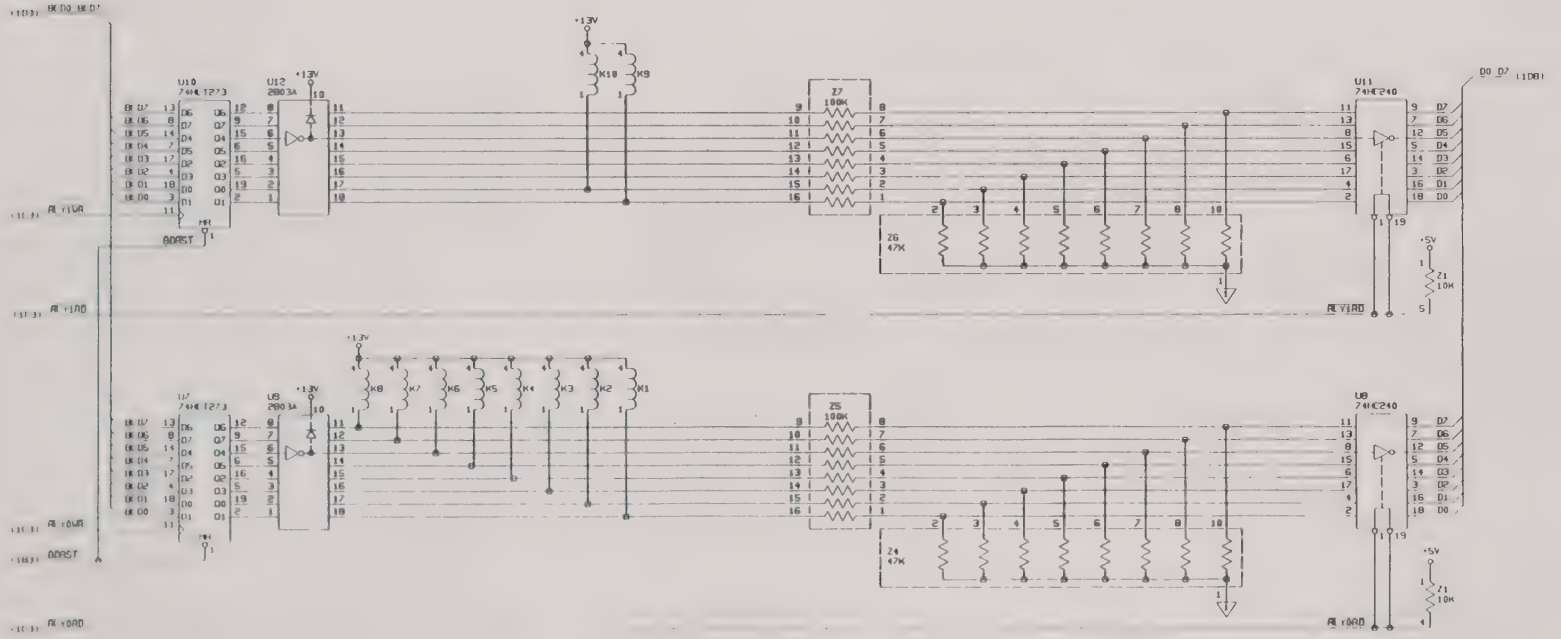
IC POWER CONNECTIONS					
REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9,12	2803A		10		9
U8,11	74HC240	20		10	
U7,10	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	

1. CAPACITOR VALUES ARE IN MICROFARADS ±10% 100V UNLESS OTHERWISE SPECIFIED
2. RESISTOR NETWORKS ARE IN OHMS, ±2%
3. RELAYS K1 THRU K10 ARE RACAL DANA P/N 310167. ALL RELAYS SHOWN IN DE ENERGIZED POSITION.

RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE, CALIFORNIA 92714				
DOCUMENT TITLE: SCHEM., POWER MODULE				
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 431757	REV: A	
SCALE: NONE		SHEET 1 OF 3		

431757

RELAY DRIVE/SENSE CELLS



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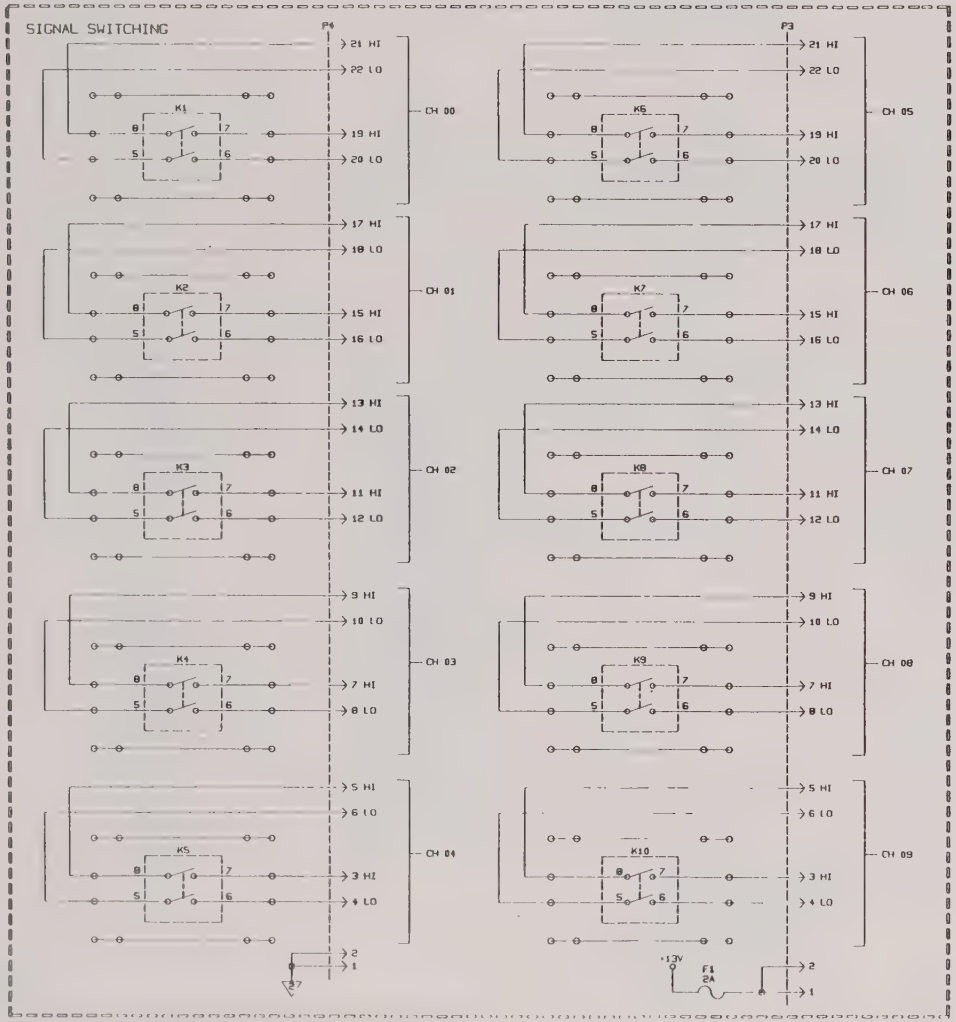
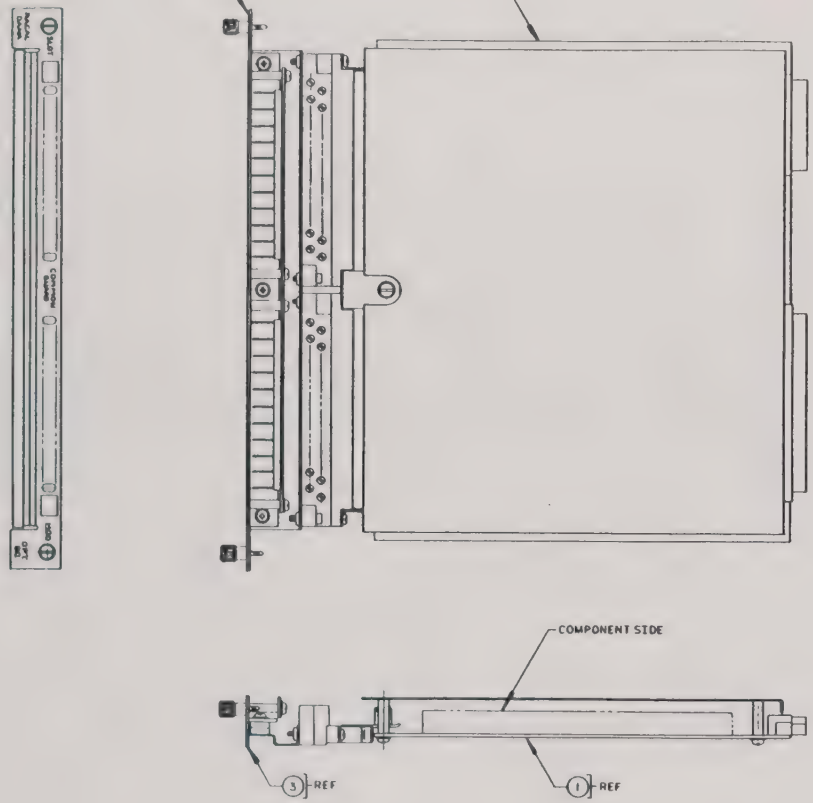
SCALE		SHEET 2 OF 3	

DOC NO 431757



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431757	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 431757



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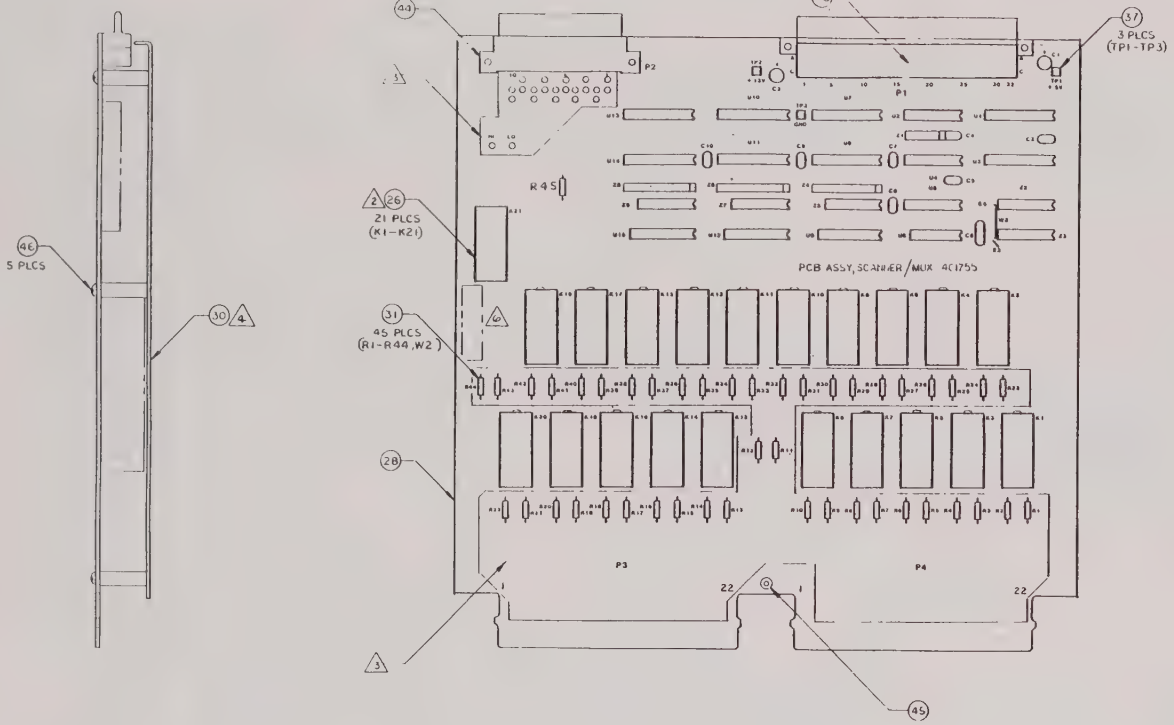
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: SCAN/MUX ASSY,OPT.30

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404444	A

SCALE —— SHEET 1 OF 2

404444



6 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

5. PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.

4 INSTALL SHIELD AFTER BOARD TEST.

3 HOLES IN THIS AREA MUST BE FREE TO SOLDER

2 CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.

1. REF SCHEMATIC 431755

NOTES UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: PCB ASSY, SCANNER/MUX

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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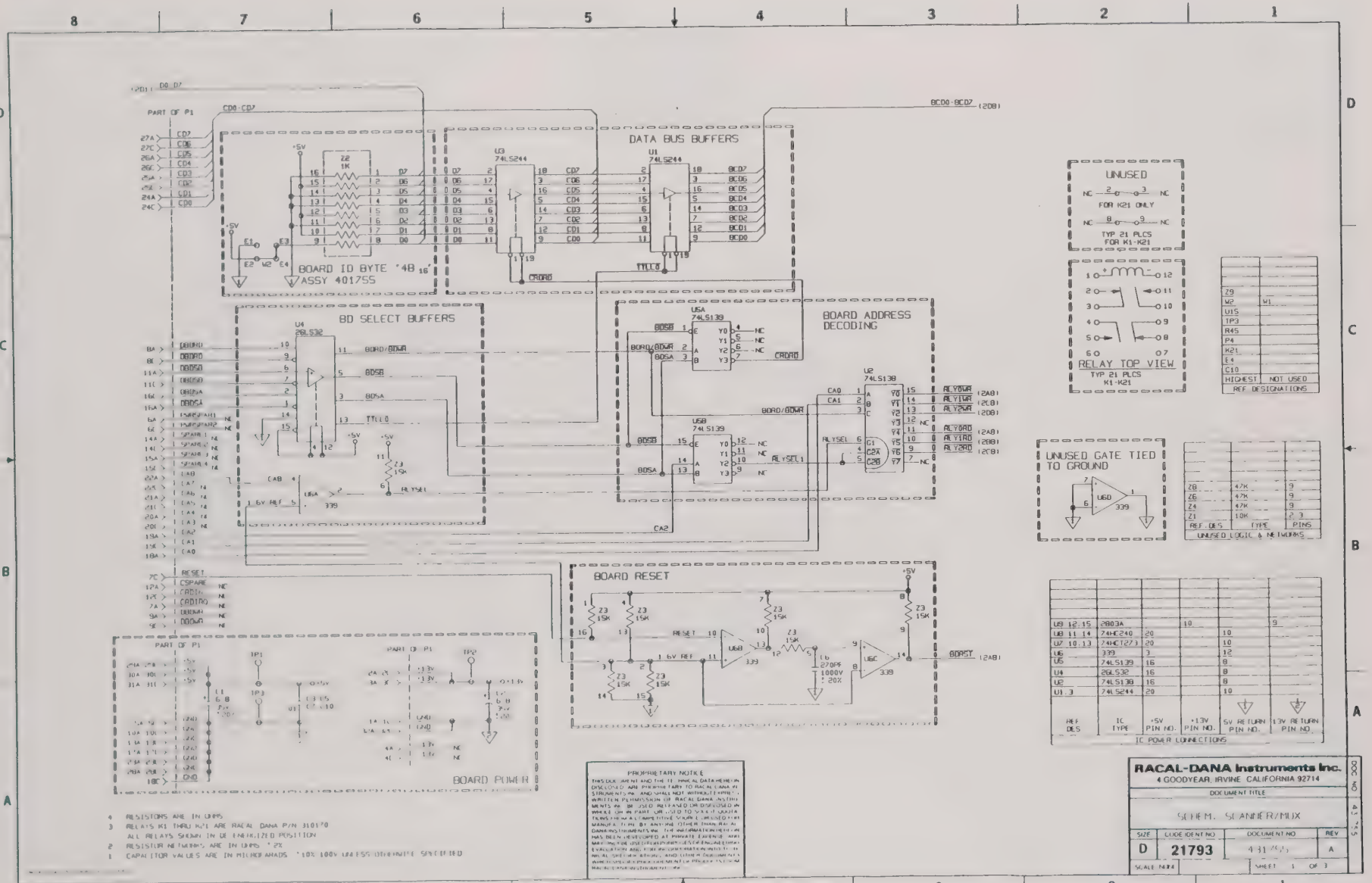
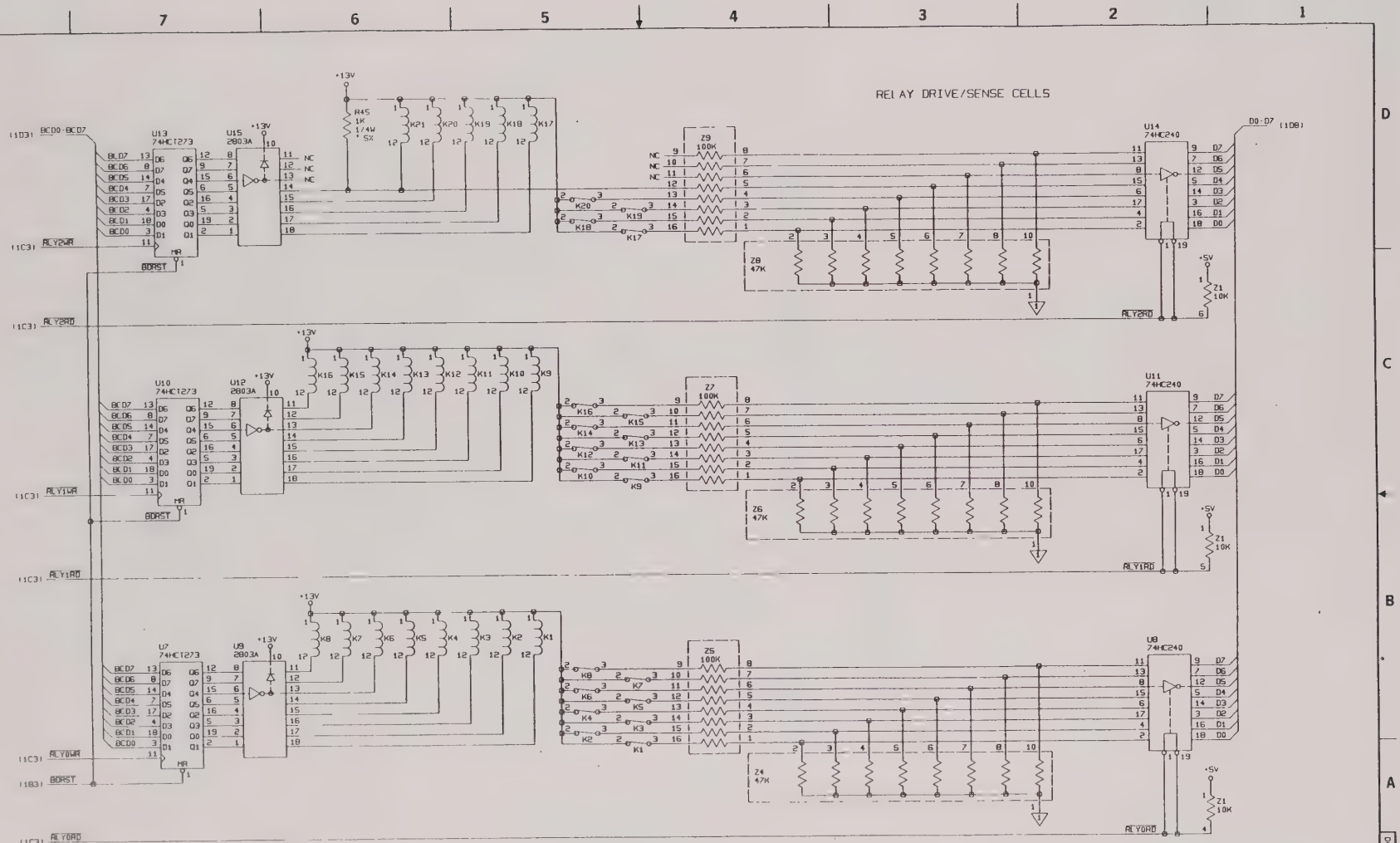
SCALE NONE | SHEET 1 OF 3

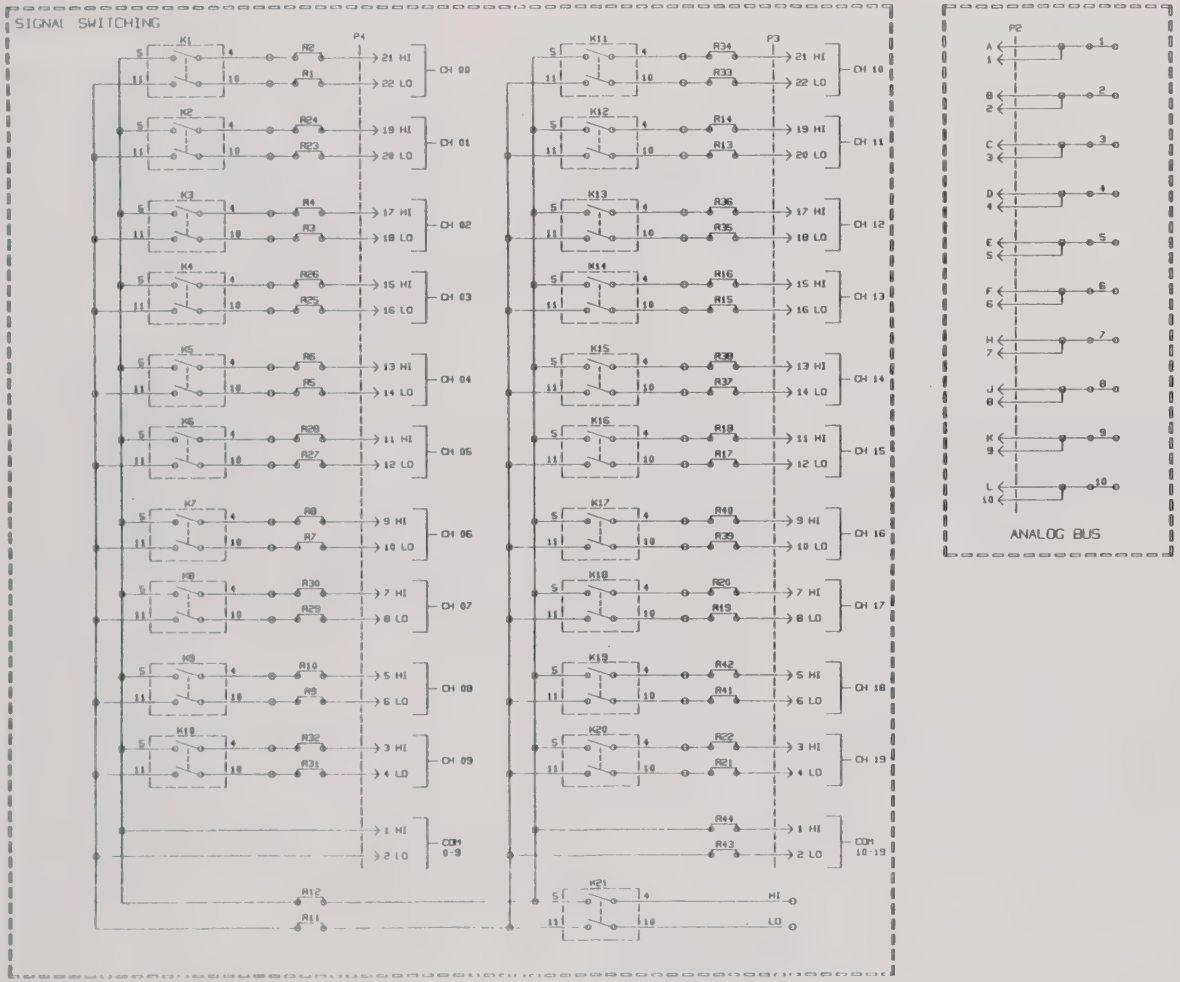
401755


DATA BUS BUFFERS
BOARD ID BYTE '48
ASSY 401755
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
UNUSED
FOR K21 ONLY
TYP 21 PLCS FOR K1-K21
RELAY TOP VIEW
TYP 21 PLCS K1-K21
UNUSED GATE TIED TO GROUND
UNUSED LOGIC & NETWORKS
IC POWER CONNECTIONS
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714
DOCUMENT TITLE
SCHEM. SCANNER/MUX
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431765
REV A
SCALE NONE
SHEET 1 OF 3



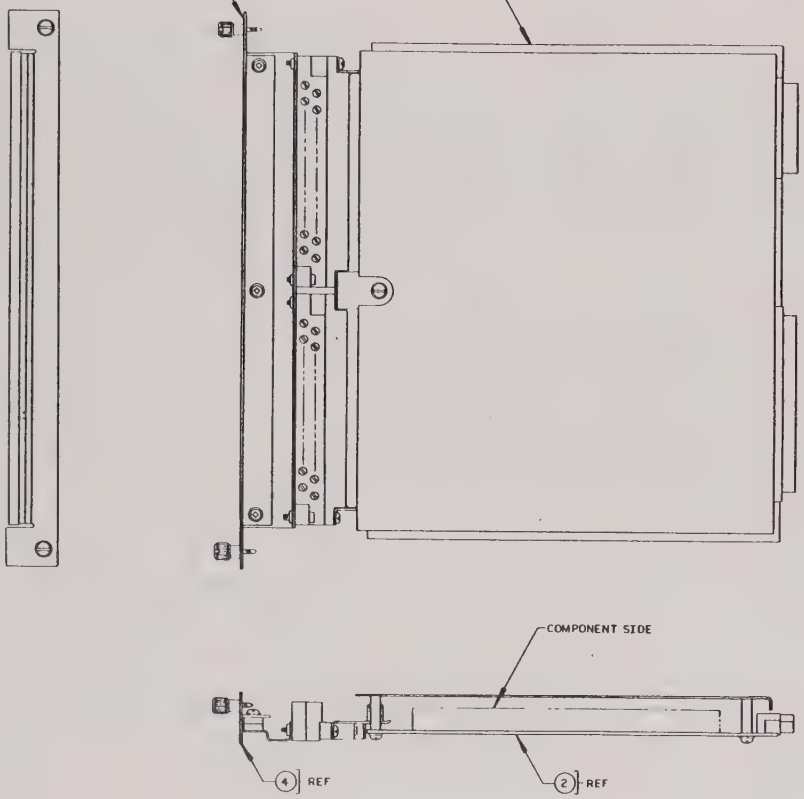
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431755



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 43 755



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NOTES UNLESS OTHERWISE SPECIFIED

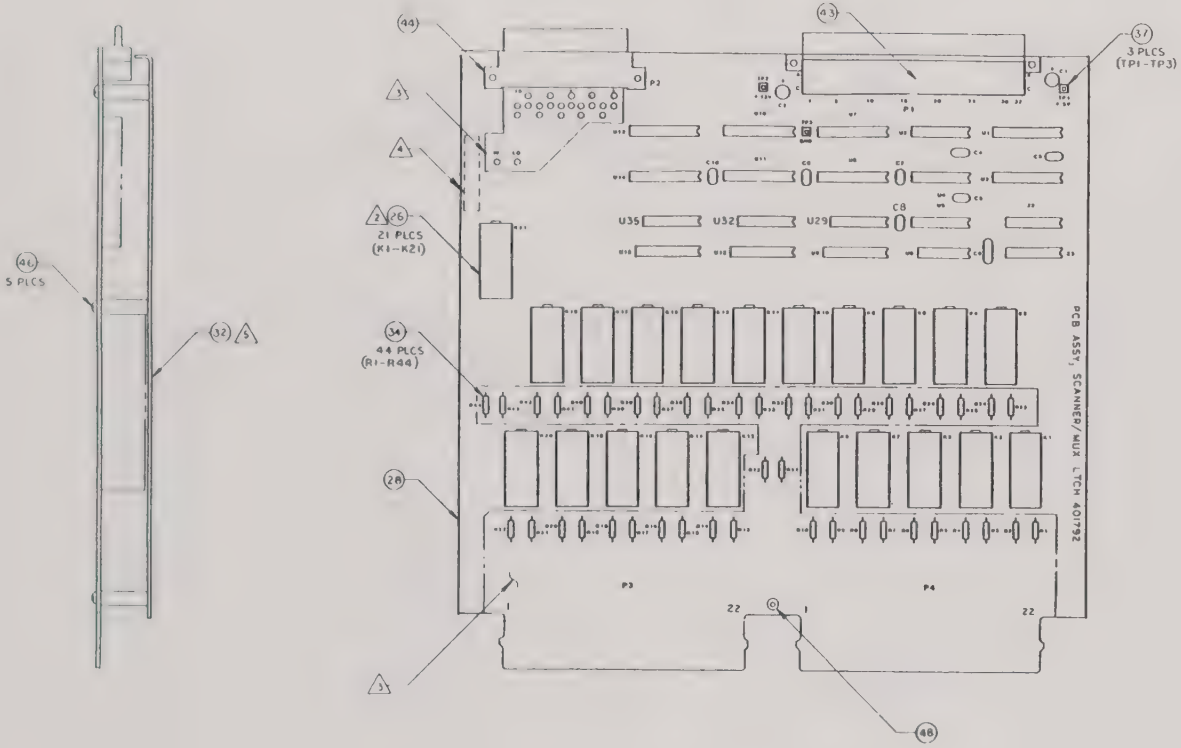
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714

DOCUMENT TITLE
SCAN/MUX ASSY, OPTL30

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404456	A

SCALE —— SHEET 1 OF 2

DOC NO 404456



(5) SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY.

(4) INK STAMP SERIAL NO APPROX WHERE SHOWN, COMP SIDE.

(3) UNUSED HOLES IN THIS AREA MUST BE FREE FROM SOLDER

(2) CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE

(1) REF SCHEMATIC 431792

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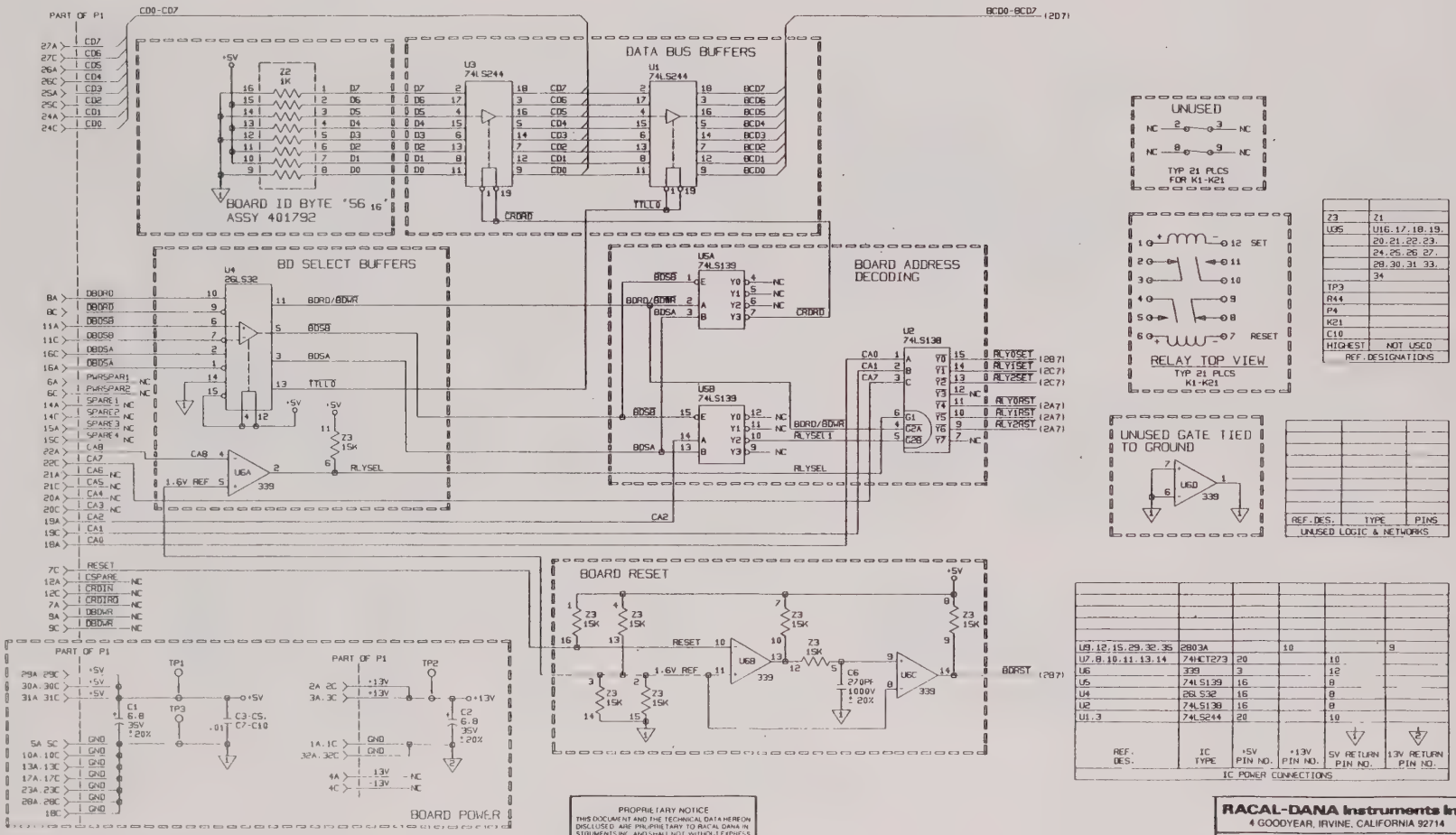
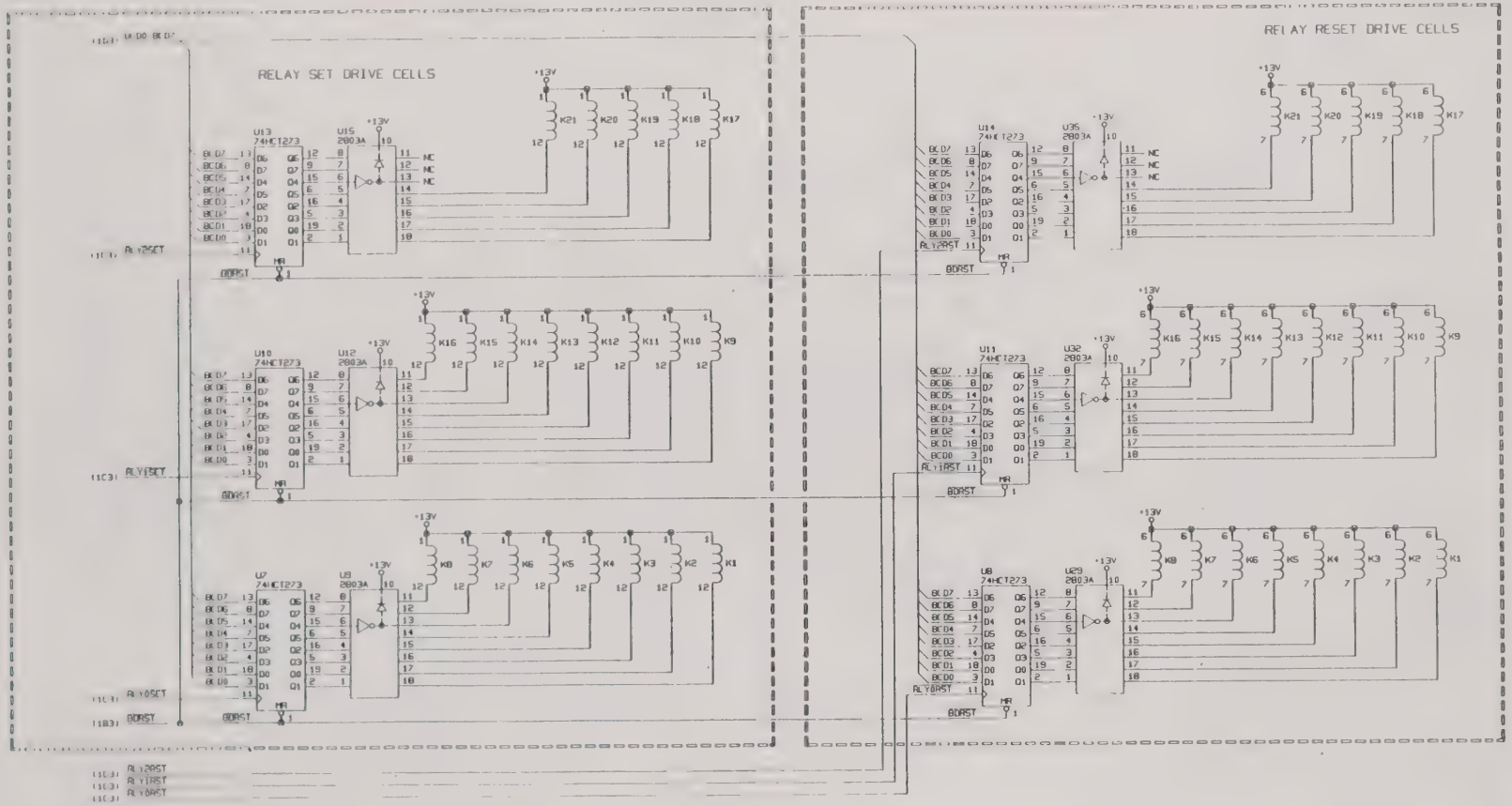
RACAL-DANA Instruments Inc.		
4 GOODYEAR, IRVINE CALIFORNIA 92714		
DOCUMENT TITLE: PCB ASSY, SCANNER/MUX L		
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 401792
REV: A	SCALE: None	SHEET 1 OF 3

DO NOT SCALE 401792



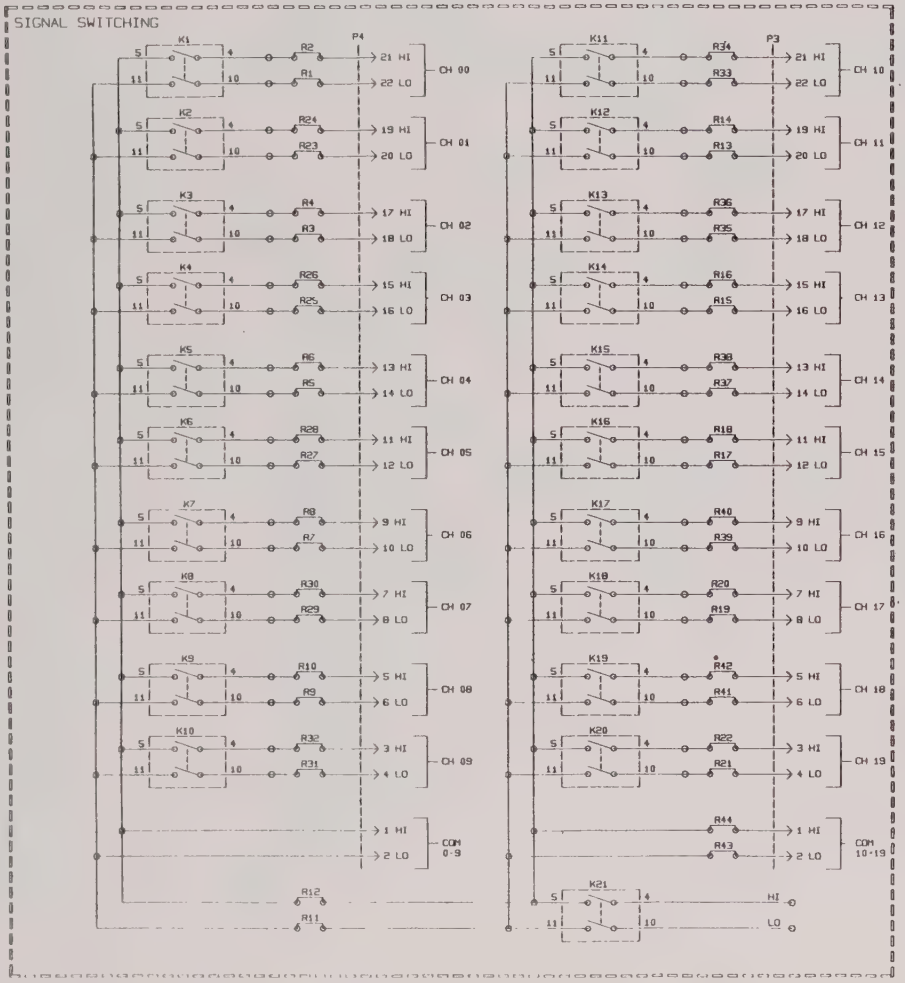
3 RELAYS K1 THRU K21 ARE RACAL DANA P/N 310181
ALL RELAYS SHOWN IN DE-ENERGIZED POSITION
2. RESISTOR NETWORKS ARE IN OHMS ±2%
1. CAPACITOR VALUES ARE IN MICROFARADS ±10% 100V UNLESS OTHERWISE SPECIFIED.

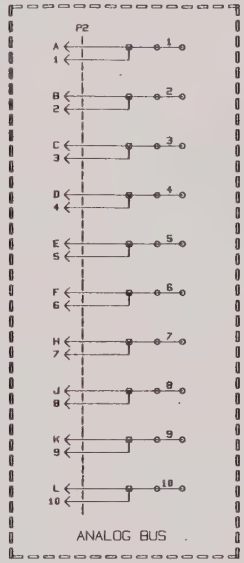
6-45



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431792	A
SCALE NONE		SHEET 2 OF 3	

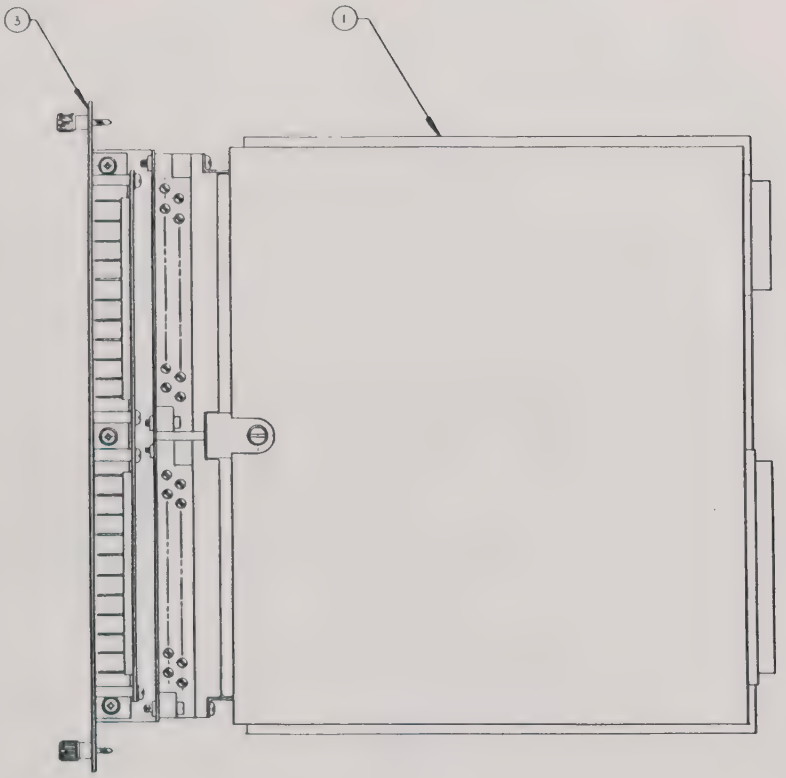
DOC NO 431792

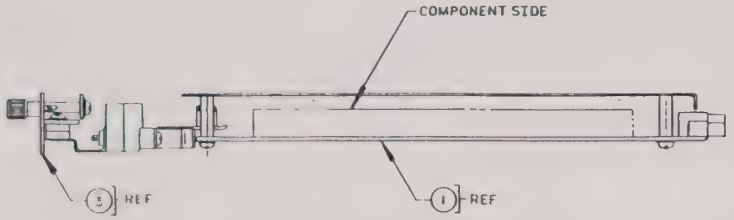




SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431792	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 431792





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RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
SCAN/MUX ASSY, OPT. 30B			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
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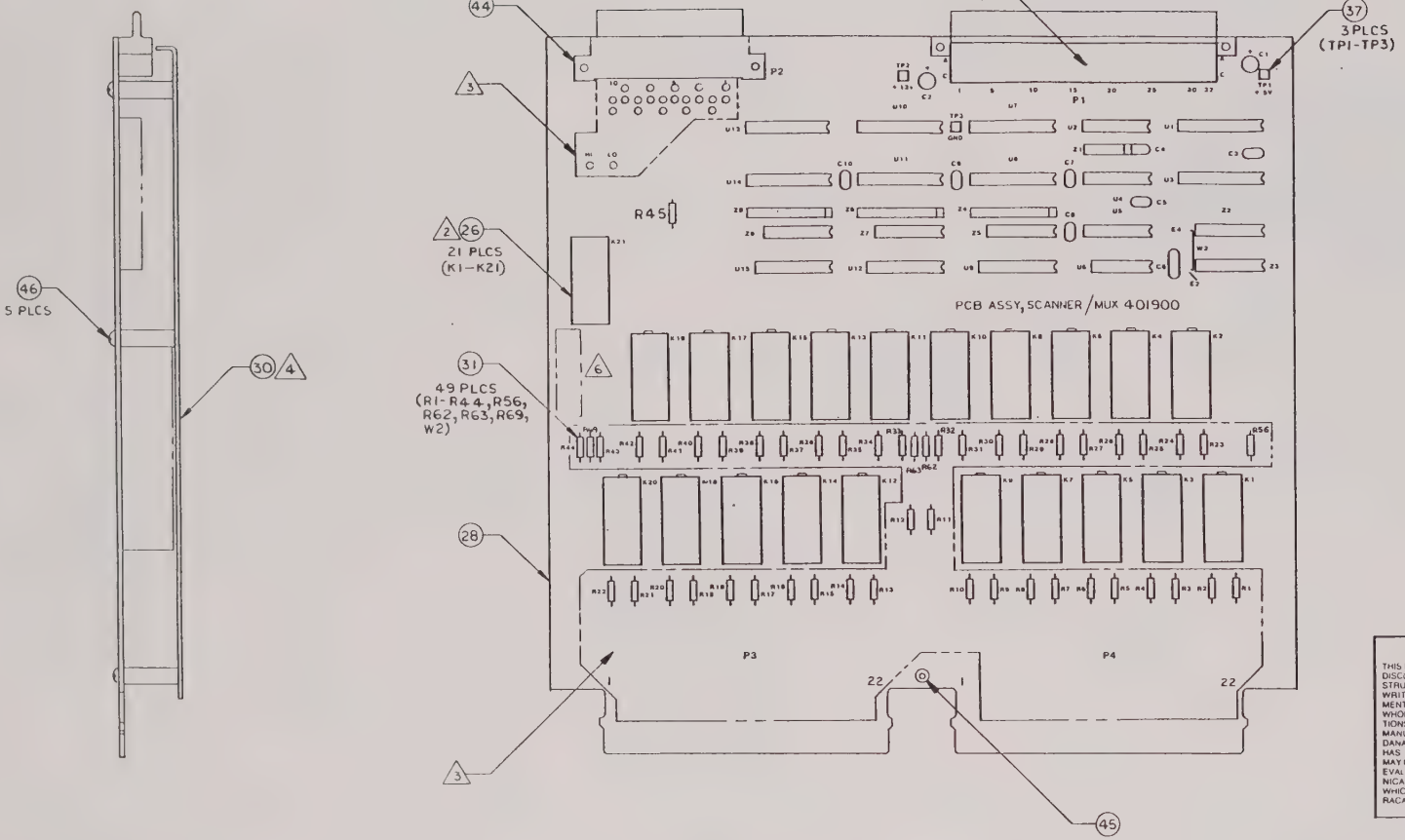
SCALE —		SHEET 1 OF 2	



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6. INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

5. PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.

4. INSTALL SHIELD AFTER BOARD TEST.

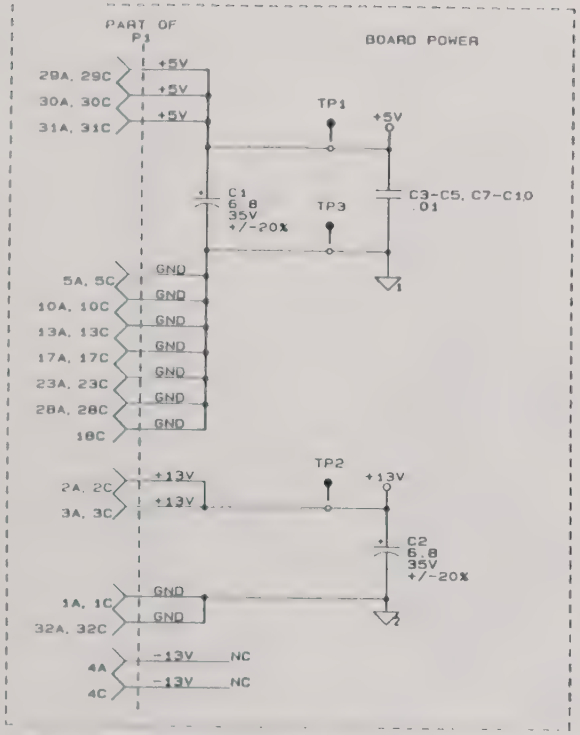
3. HOLES IN THIS AREA MUST BE FREE TO SOLDER

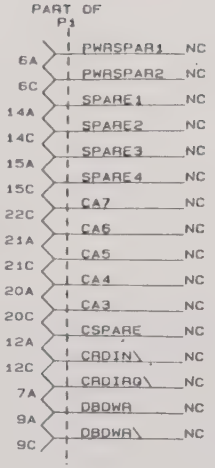
2. CAUTION. DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.

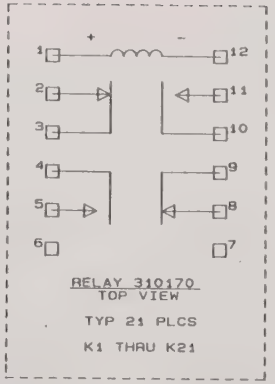
1. REF. SCHEMATIC 431900.

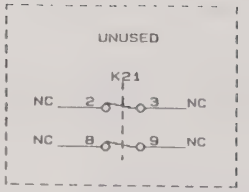
NOTES: UNLESS OTHERWISE SPECIFIED

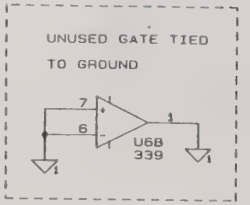
RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE CALIFORNIA 92714			
DOCUMENT TITLE: PCB ASSY, SCANNER/MUX			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 401900	REV: A
SCALE: ——		SHEET 1 OF 3	











REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15	2803A		10		9
U8, 11, 14	74HC240	20		10	
U7, 10, 13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

HIGHEST REF. DES.
Z9
W2
U15
TP3
R69
P4
K21
E4
C10

5. R46 THRU R55, R57 THRU R61 AND R64 THRU R68 TO BE INSTALLED BY USER.
4. RESISTORS ARE IN OHMS
3. RELAYS K1 THRU K21 ARE RACAL DANA P/N 310170 ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
2. RESISTOR NETWORKS ARE IN OHMS, +/-2%.
1. CAPACITOR VALUES ARE IN MICROFARADS, +/-10%, 100V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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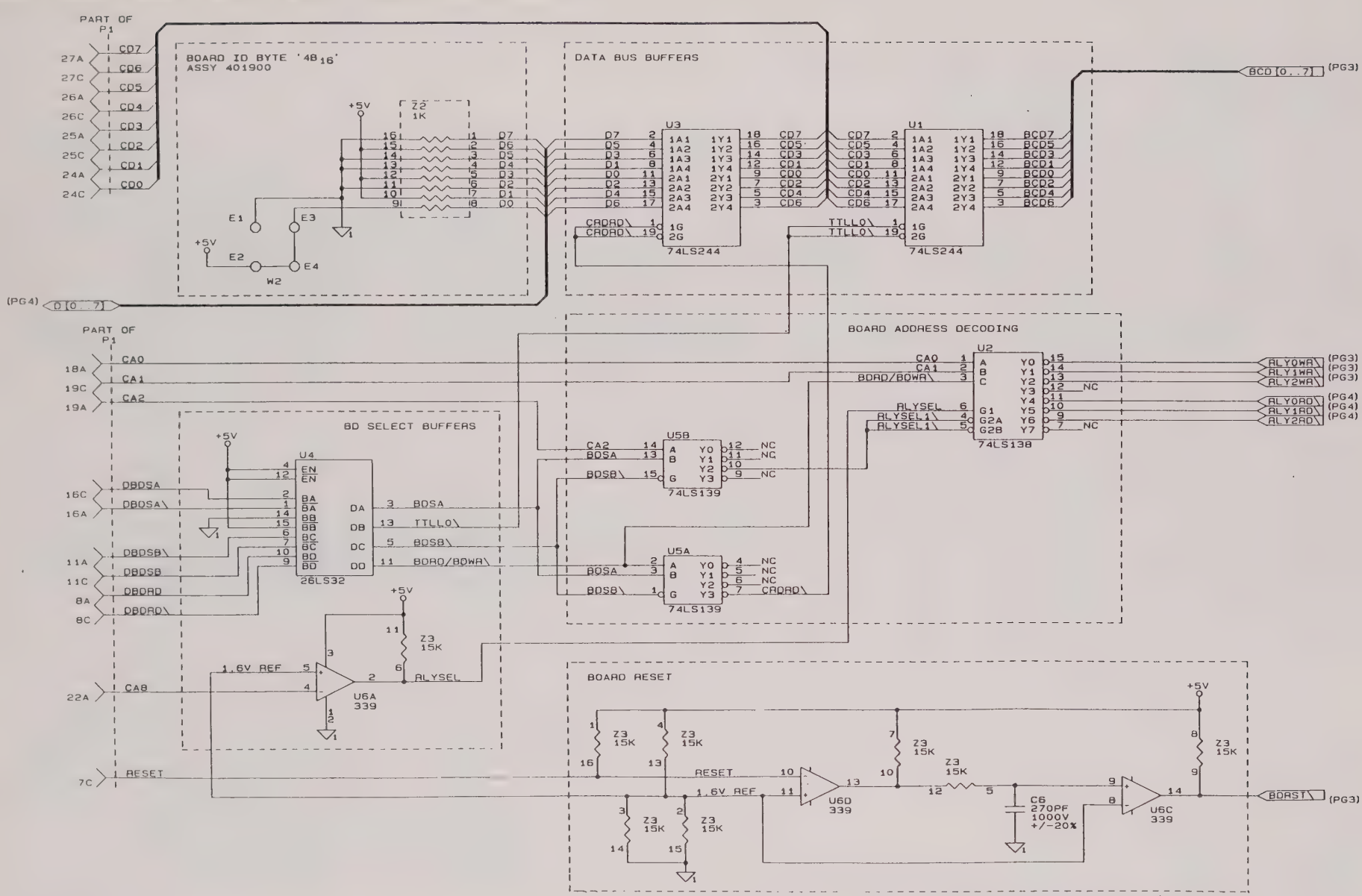
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

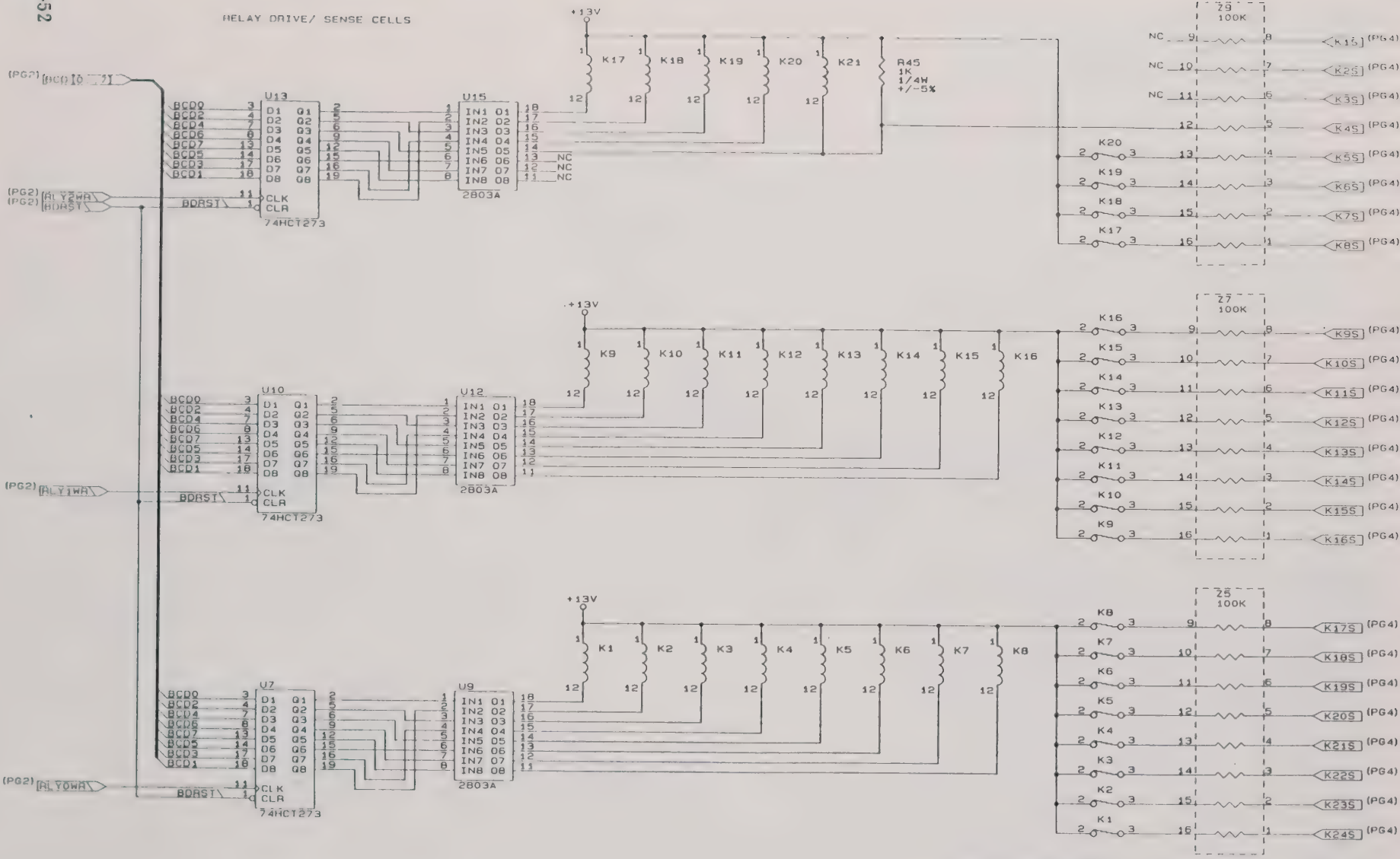
SCHEM., SCANNER/MUX

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431900	A

SCALE ——— SHEET 1 OF 6

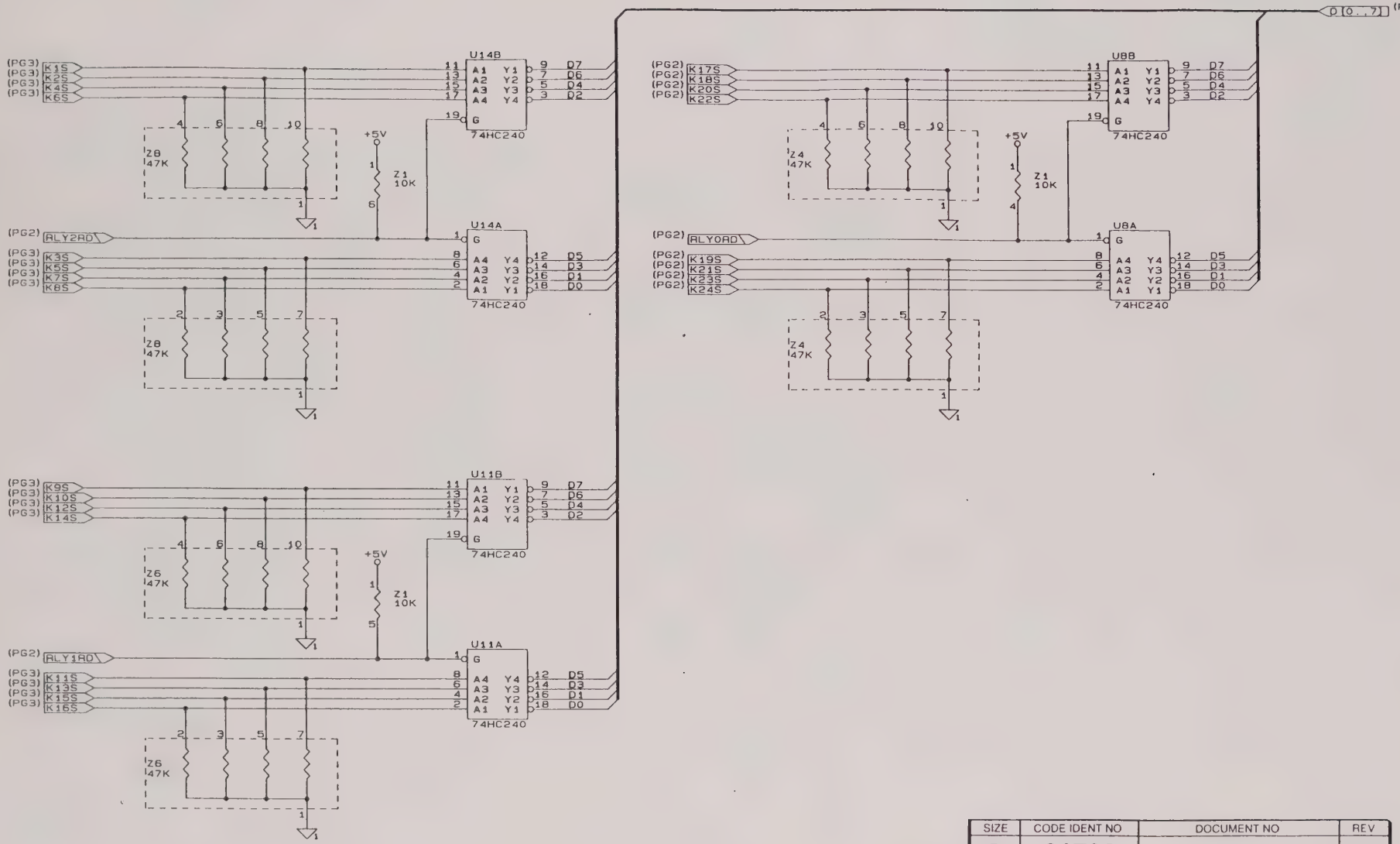


SIZE	CODE IDENT NO.	DOCUMENT NO	REV
B	21793	431900	A
SCALE		SHEET 2 OF 6	

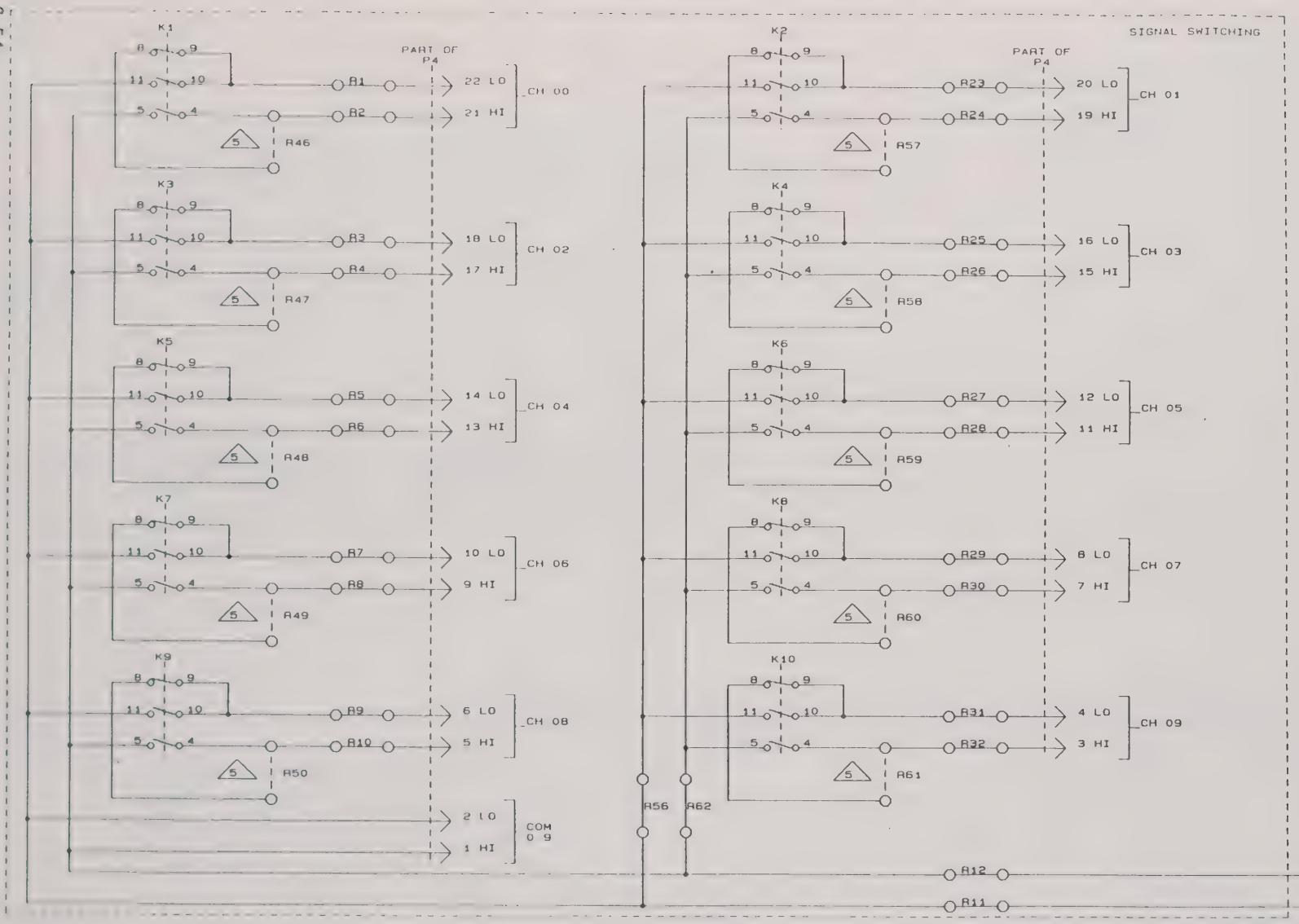


SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431900	A
SCALE		SHEET 3 OF 6	

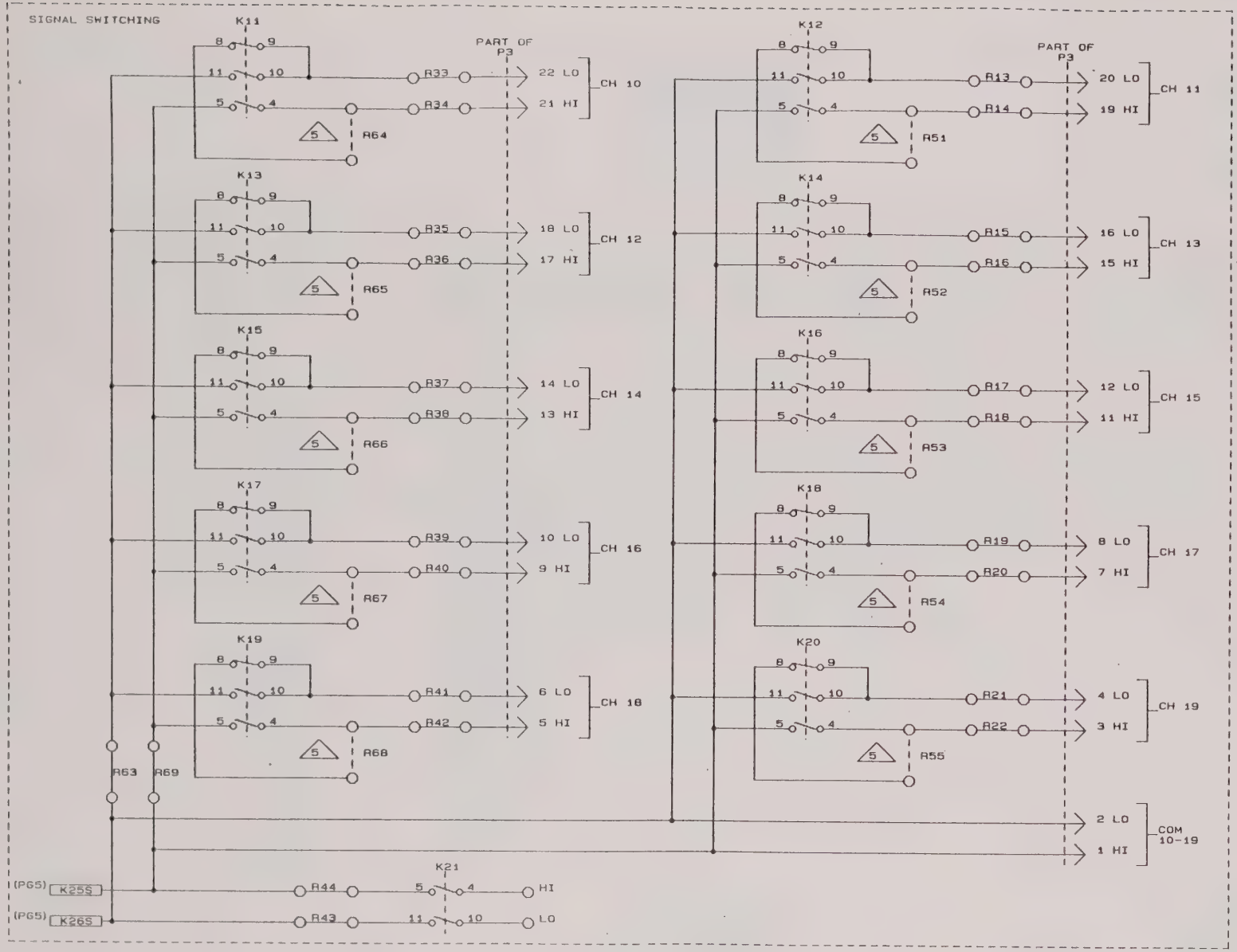
RELAY DRIVE/ SENSE CELLS



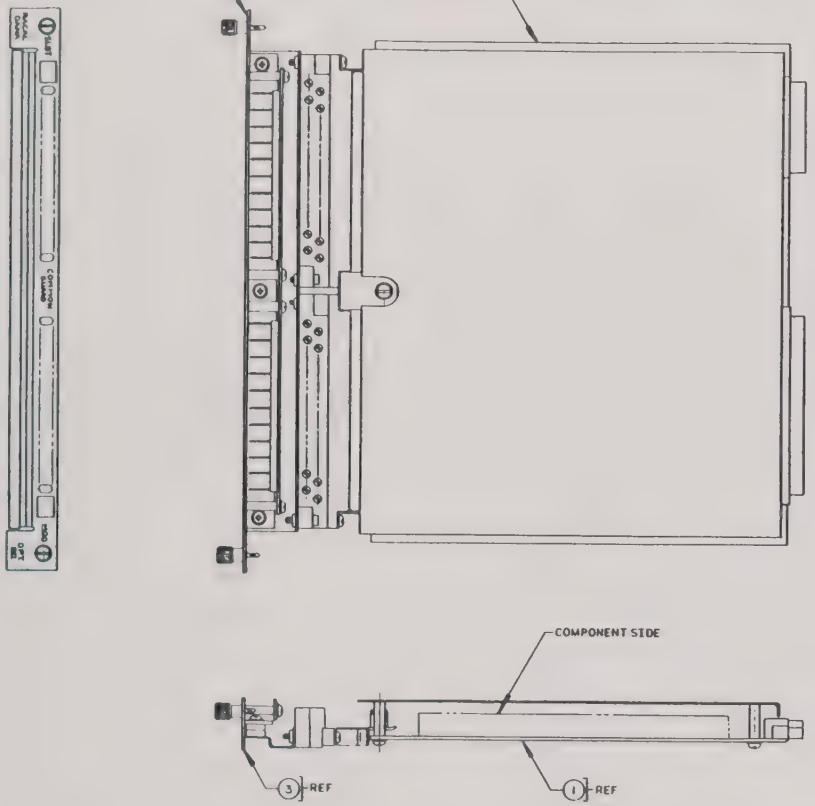
SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431900	A
SCALE ——		SHEET 4 OF 6	



SIZE	CODE IDENT NO.	DOCUMENT NO	REV
B	21793	431900	A
SCALE		SHEET 5 OF 6	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431900	A
SCALE		SHEET 6 OF 6	



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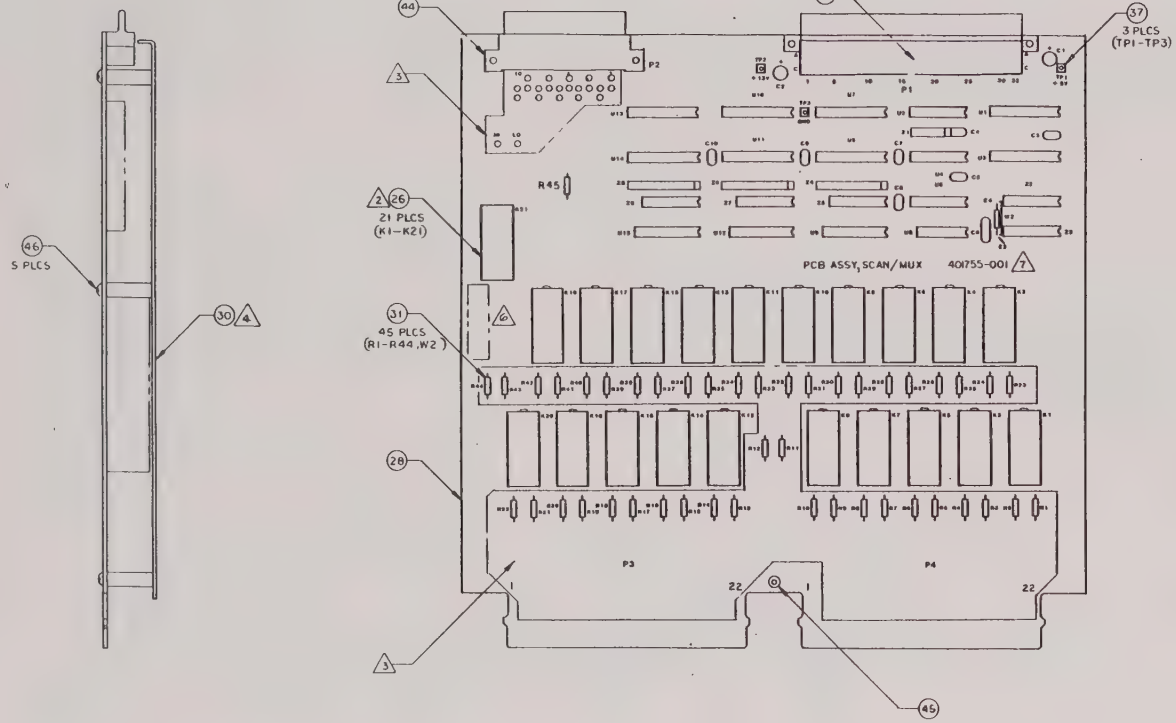
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE			
SCAN/MUX ASSY, OPT. 30C			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404612	A
SCALE ——		SHEET 1 OF 2	

DOC NO 404612



7. INK STAMP DASH NUMBER 001 ON COMPONENT SIDE IN INDICATED AREA.

6. INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

5. PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.

4. INSTALL SHIELD AFTER BOARD TEST.

3. HOLES IN THIS AREA MUST BE FREE TO SOLDER

2. CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLORDETHANE,

1. REF SCHEMATIC 431755-001.

NOTES: UNLESS OTHERWISE SPECIFIED

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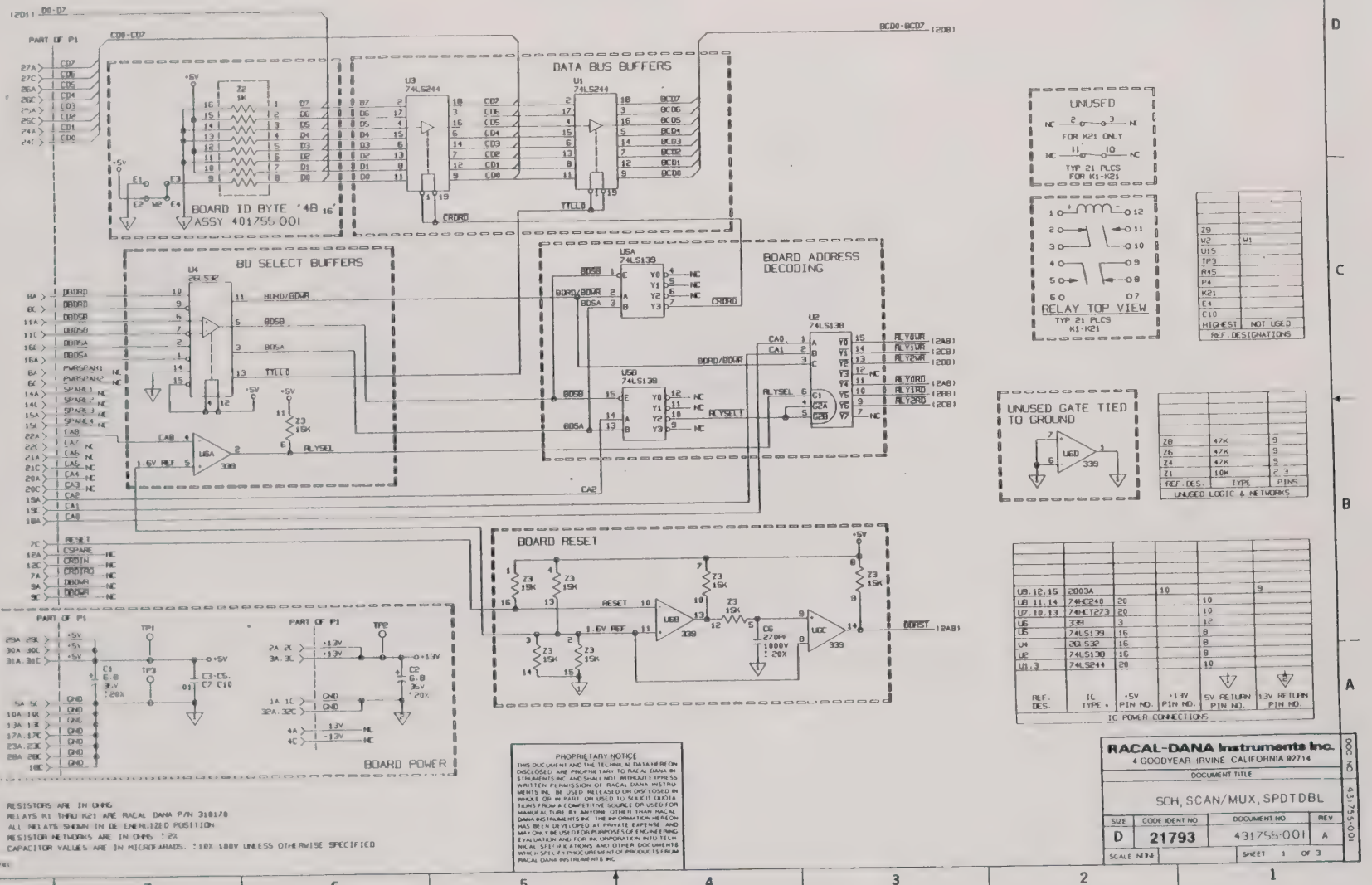
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

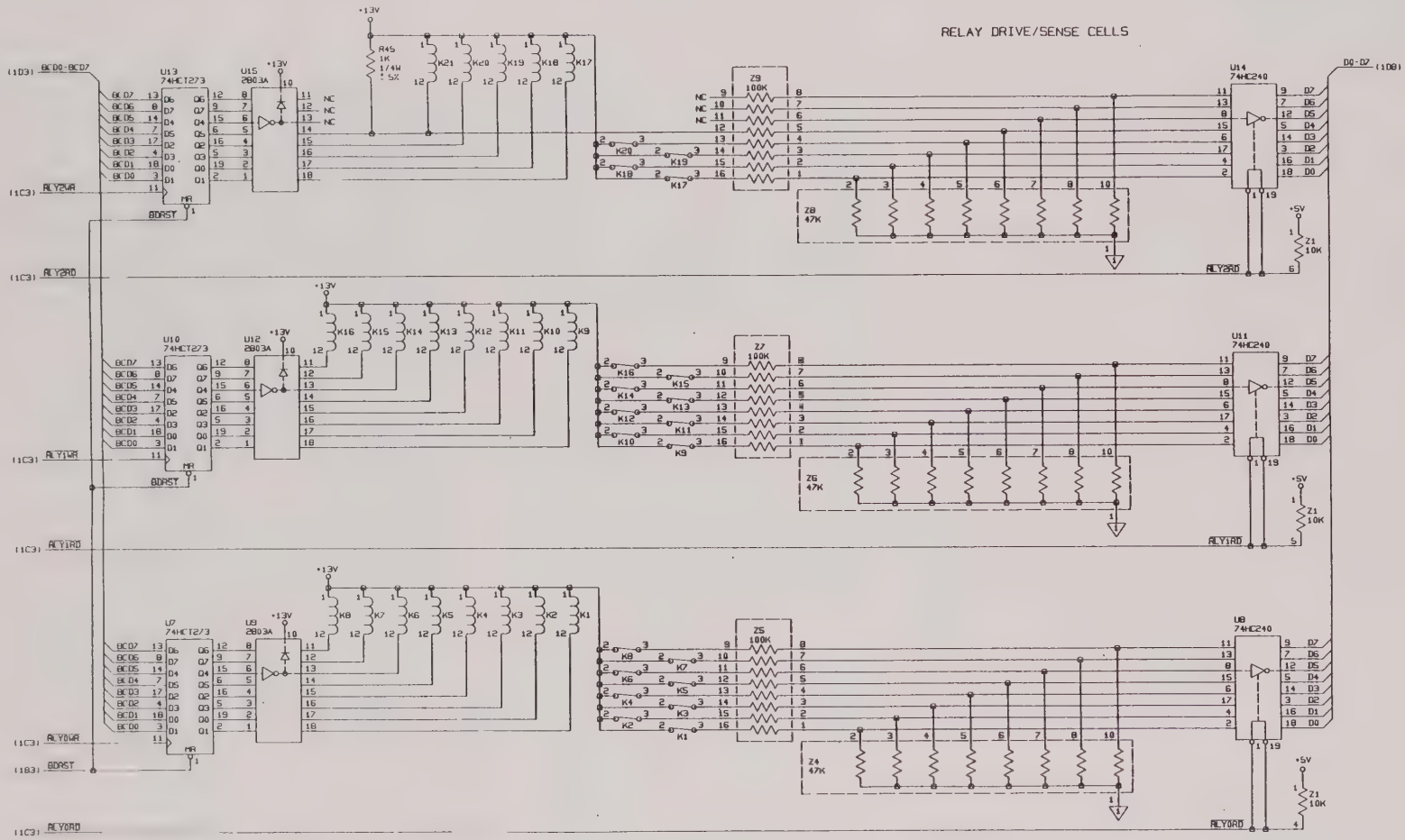
DOCUMENT TITLE: ASY, SCAN/MUX, SPDTDBL

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401755-001	A

SCALE NONE | SHEET 1 OF 3

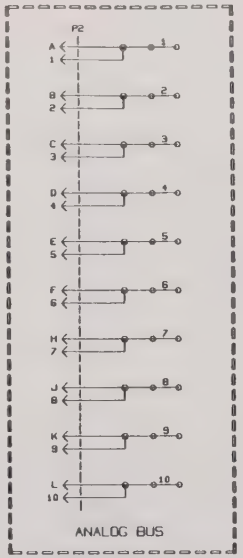
DOC NO 401755-001


DATA BUS BUFFERS
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
BOARD ID BYTE '48 16'
ASSY 401755 001
UNUSED
FOR K21 ONLY
TYP 21 PLCS FOR K1-K21
RELAY TOP VIEW
TYP 21 PLCS K1-K21
UNUSED GATE TIED TO GROUND
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714
DOCUMENT TITLE
SCH, SCAN/MUX, SPDTDBL
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431755-001
REV A
SCALE NONE
SHEET 1 OF 3
DOC NO 431755-001



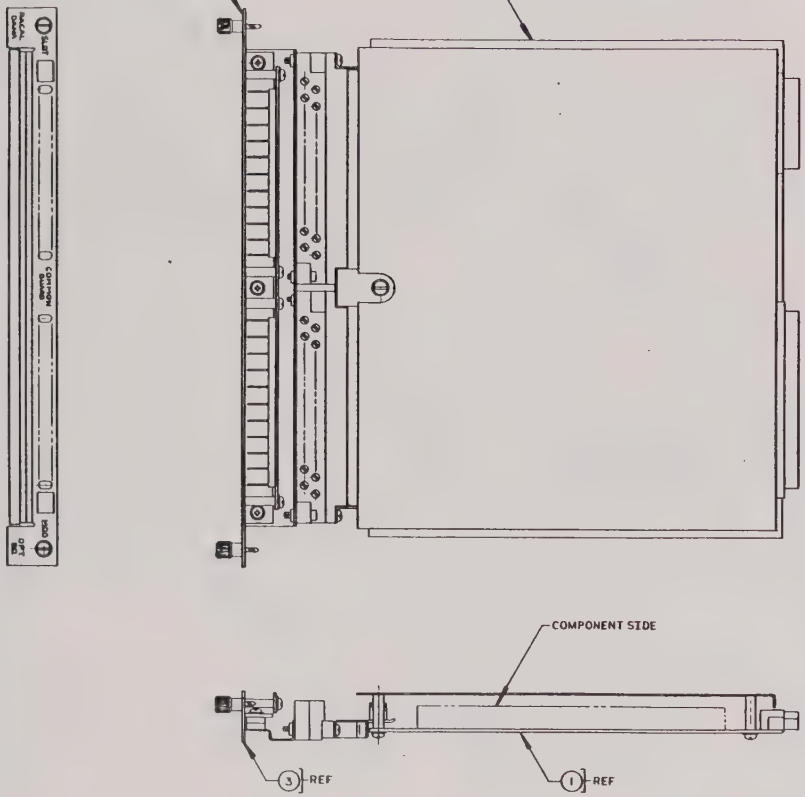
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755-001	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431755-001



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755 001	A
SCALE NONE		SHEET 3 OF 3	

431755-001 REV A



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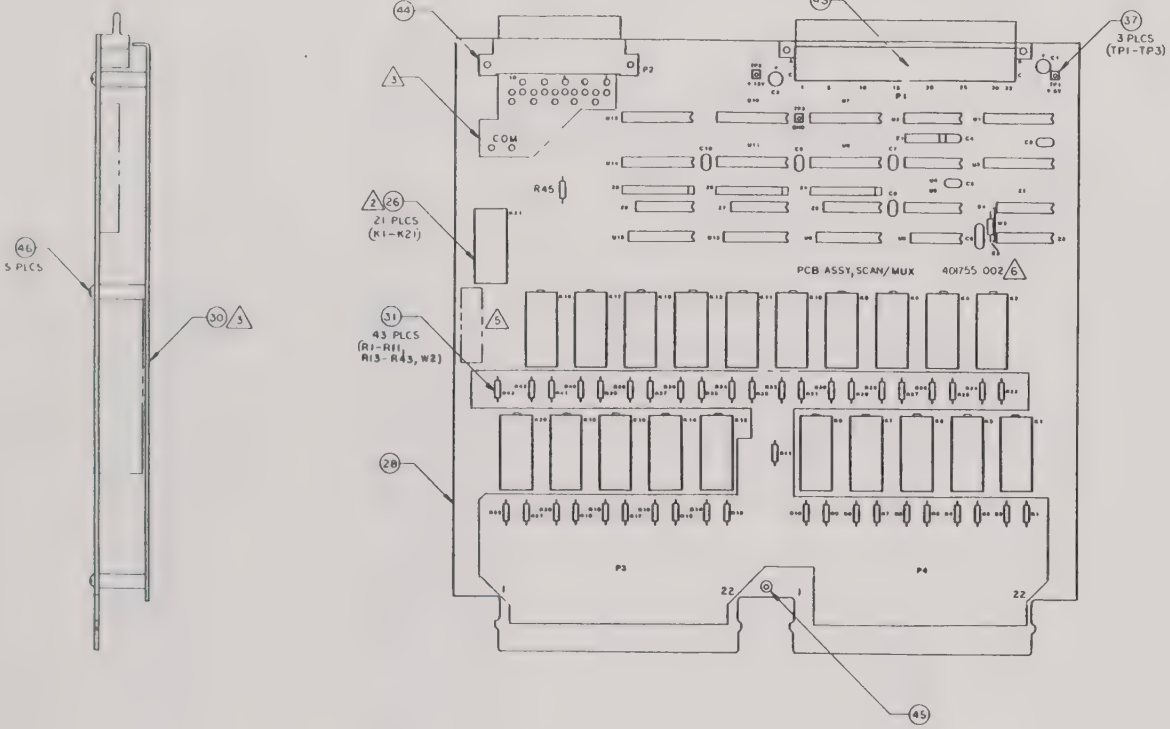
NOTES UNLESS OTHERWISE SPECIFIED

RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE, CALIFORNIA 92714			DOC NO 404613
DOCUMENT TITLE: SCAN/MUX ASSY, OPT.30D			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 404613	REV: A
SCALE: —		SHEET 1 OF 2	



6 INK STAMP DASH NUMBER 002 ON COMPONENT SIDE IN INDICATED AREA.

5 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

4 PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.

3 INSTALL SHIELD AFTER BOARD TEST.

2 CAUTION DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE

1 REF SCHEMATIC 431755-002.

NOTES UNLESS OTHERWISE SPECIFIED

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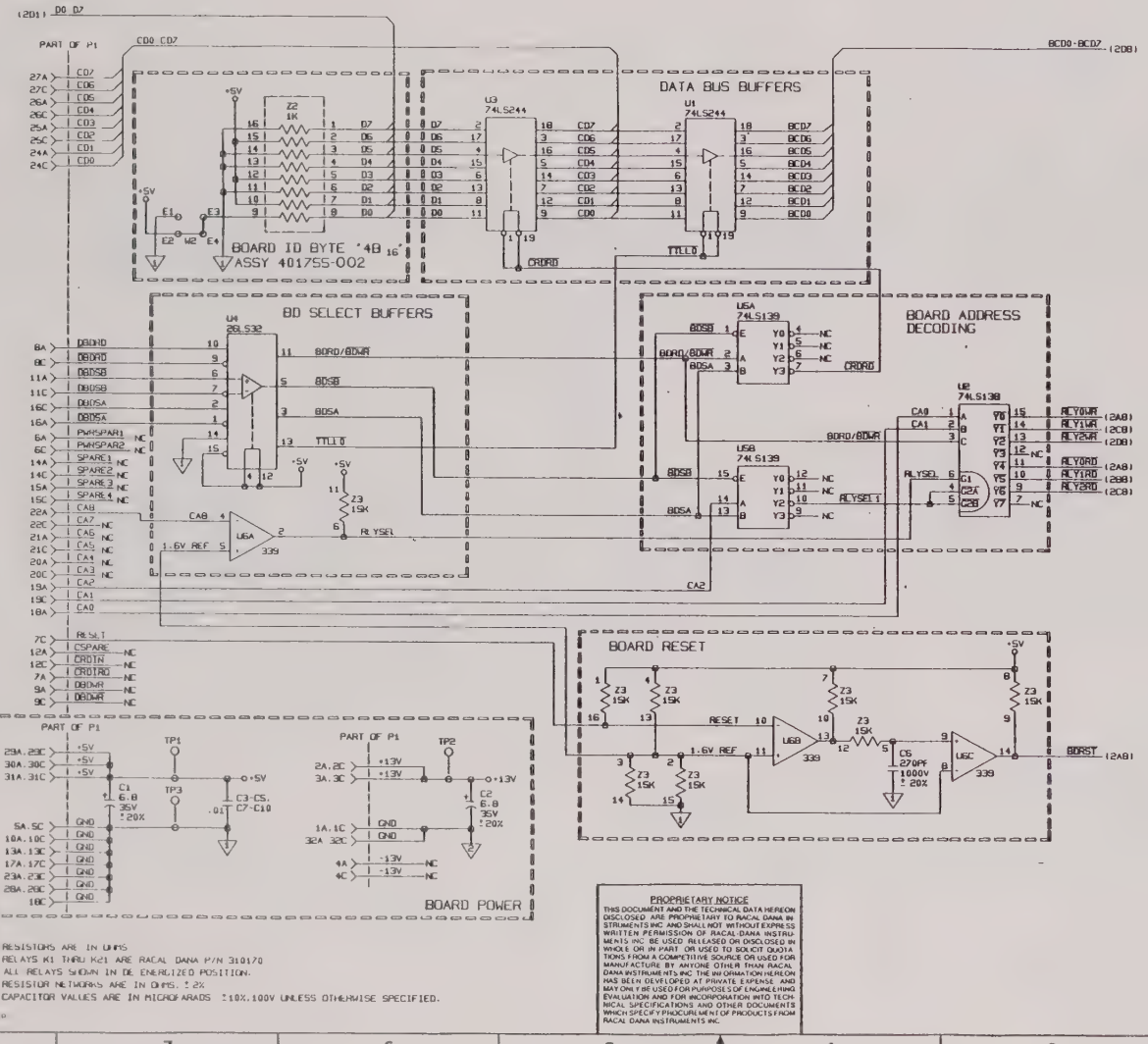
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE: ASY, SCAN/MUX, SPDTSGL

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401755-002	A

SCALE none | SHEET 1 OF 3

DOC NO 401755-002


DATA BUS BUFFERS
BOARD ID BYTE '4B 16'
ASSY 401755-002
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
UNUSED
FOR K21 ONLY
TYP 21 PLCS FOR K1-K21
RELAY TOP VIEW
TYP 21 PLCS K1-K21
UNUSED GATE TIED TO GROUND
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REF. DESIGNATIONS	
Z9	
W2	W1
U15	
TP3	
R45	R12, R44
P4	
K21	
E4	
C10	
HIGHEST	NOT USED

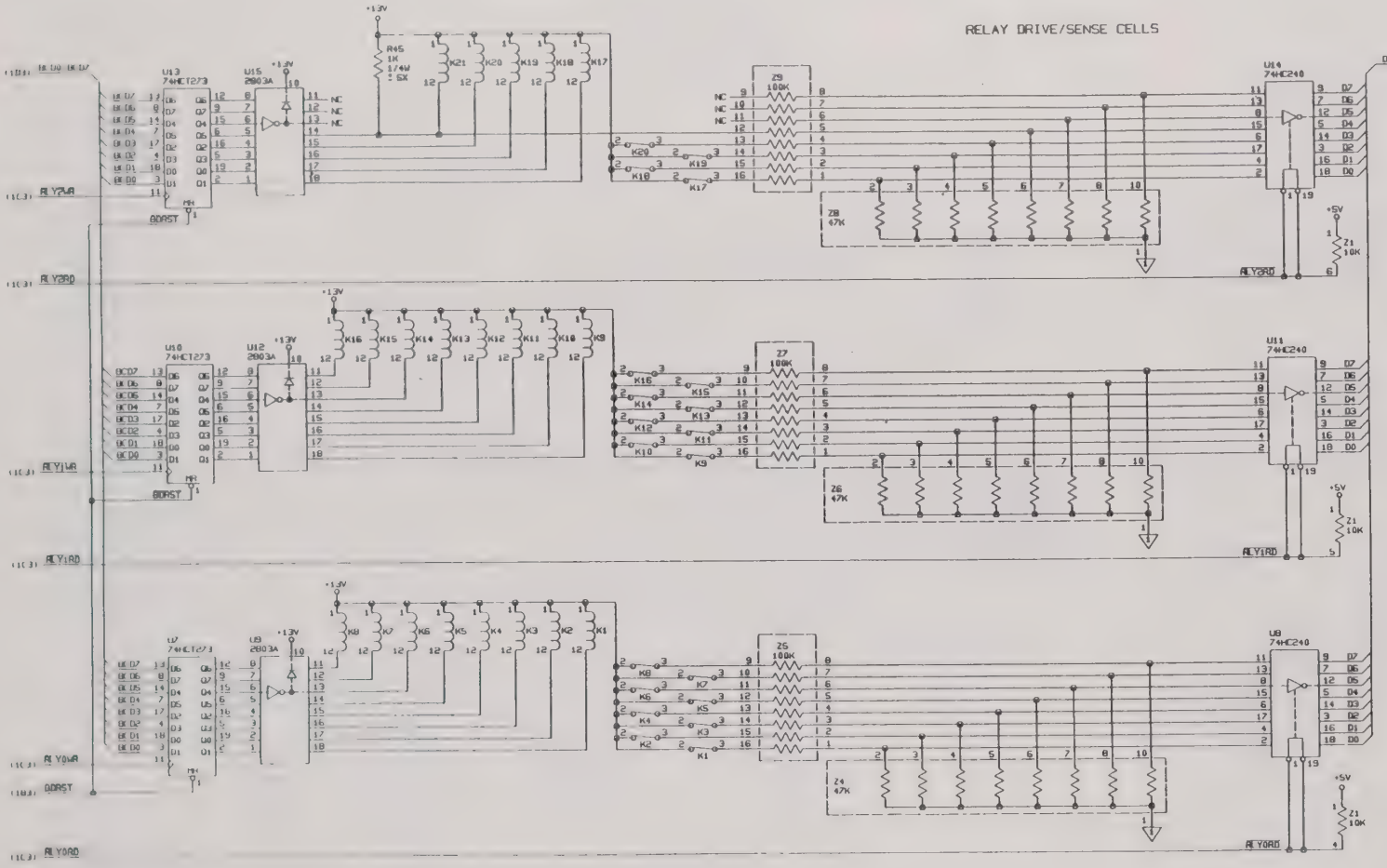
UNUSED LOGIC & NETWORKS		
REF. DES.	TYPE	PINS
Z8	47K	9
Z6	47K	9
Z4	47K	9
Z1	10K	2,3

IC POWER CONNECTIONS					
REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9,12,15	2803A		10		9
U8,11,14	74HC240	20		10	
U7,10,13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	

1. CAPACITOR VALUES ARE IN MICROFARADS ±10%,100V UNLESS OTHERWISE SPECIFIED.
2. RESISTOR NETWORKS ARE IN OHMS, ±2%
3. RELAYS K1 THRU K21 ARE RACAL DANA P/N 310170
   ALL RELAYS SHOWN IN DE ENERGIZED POSITION.
4. RESISTORS ARE IN OHMS

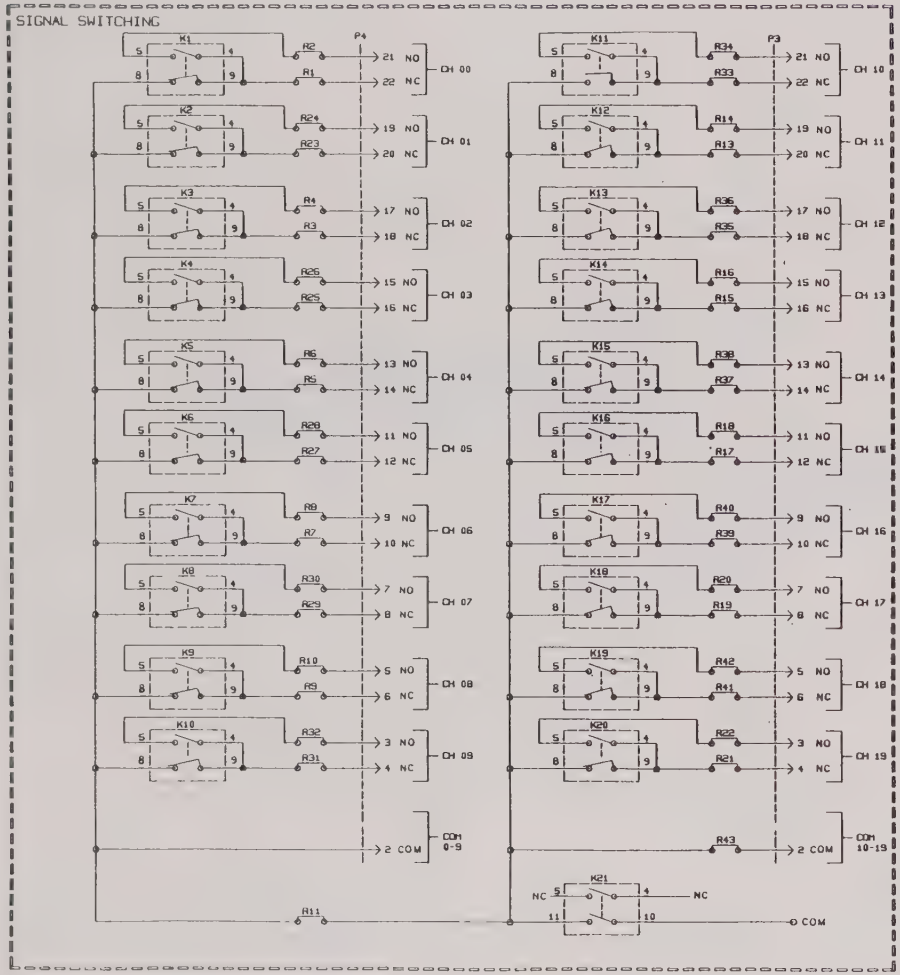
NOTES UNLESS OTHERWISE SPECIFIED

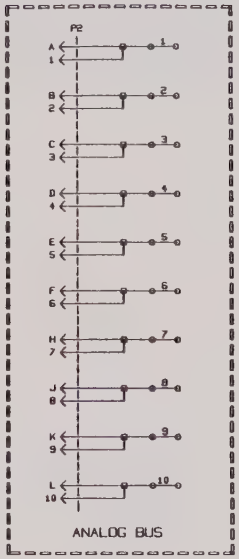
RACAL-DANA Instruments Inc.			DOC. NO. 431755-002
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE: SCH, SCAN/MUX, SPDTSGL			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 431755-002	REV: A
SCALE: NONE		SHEET 1 OF 3	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755-002	A
SCALE NONE		SHEET 2 OF 3	

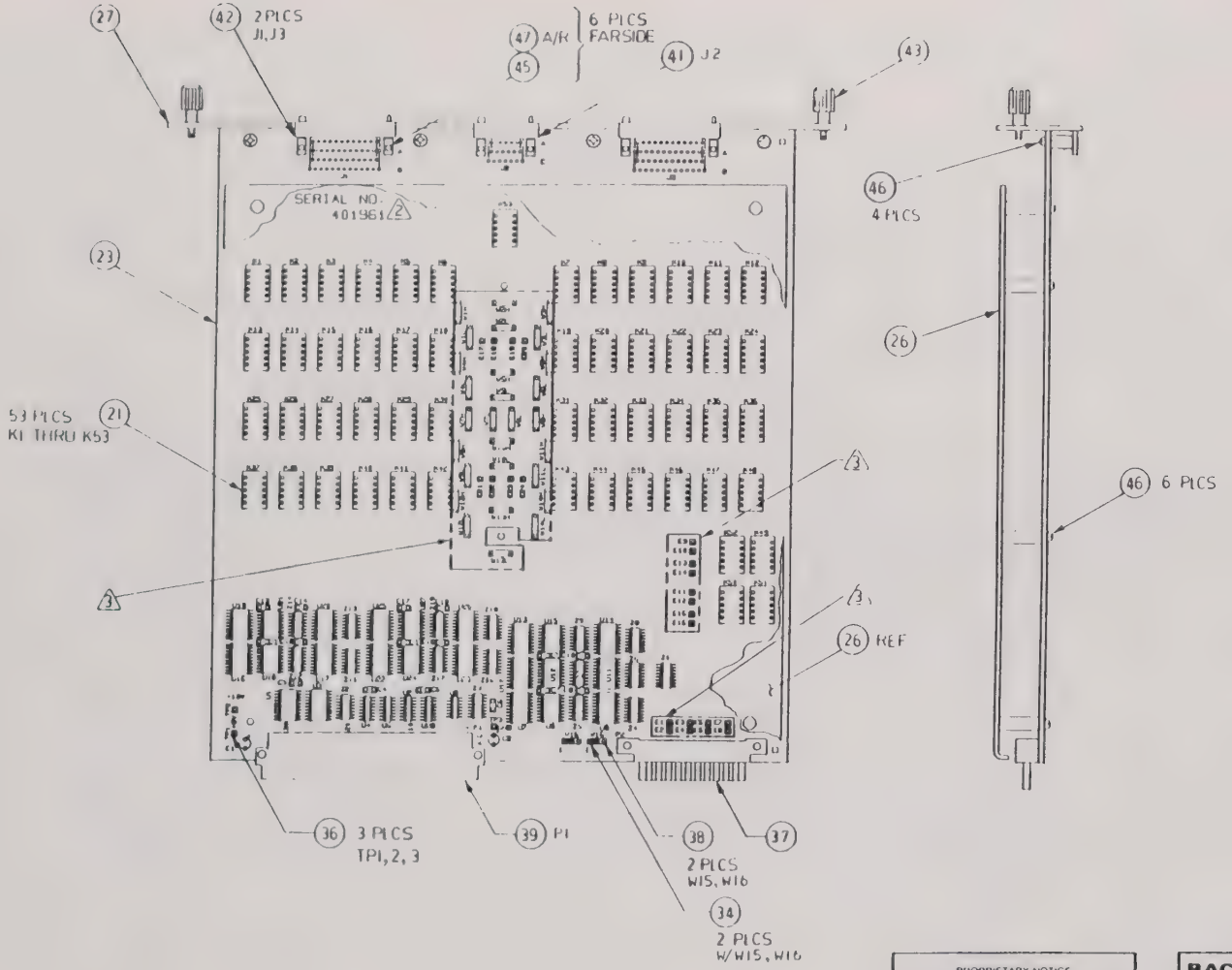
DOC. NO. 431755-002





SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431755-002	A
SCALE NONE		SHEET 3 OF 3	

431755-002 DW 300



(3) HOLES IN THIS AREA MUST BE FREE FROM SOLDER.

(2) INK STAMP SERIAL NO. ON COMPONENT SIDE IN INDICATED AREA.

1. REFERENCE SCHEMATIC 431961.

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: PCB ASSY, 1250-35 OPT

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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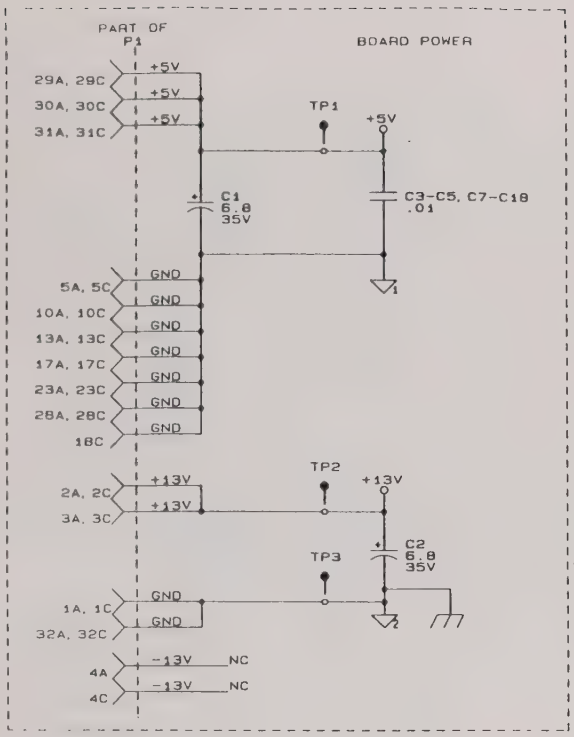
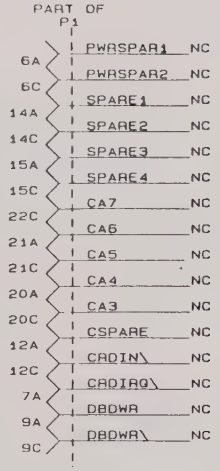
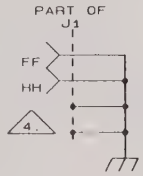
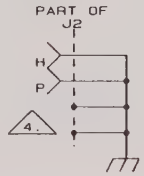
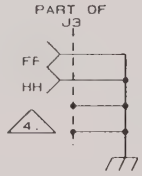
SCALE - SHEET 1 OF 2

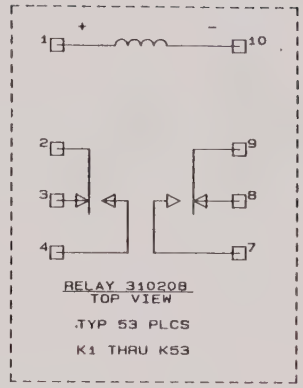


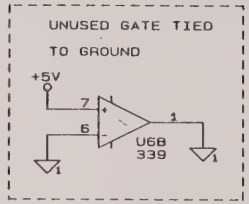












REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15, 18, 21, 24, 27	2803		10		9
U8, 11, 14, 17, 20, 23, 26	74HC240	20		10	
U7, 10, 13, 16, 19, 22, 25	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2, 28	74LS138	16		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

HIGHEST REF. DES.
Z19
W16
U28
TP3
P2
K53
J3
E24
C18

5. PARTS ARE NOT INSTALLED, USER SELECTABLE.

4. CONNECTOR BODIES FOR J1-J3 TIED TO CHASSIS GROUND.

3. RELAYS K1 THRU K53 ARE RACAL-DANA P/N 310208. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.

2. RESISTOR NETWORKS ARE IN OHMS.

1 CAPACITOR VALUES ARE IN MICROFARADS, +/-20%, 50V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

SCHEM., 1250-35-OPT

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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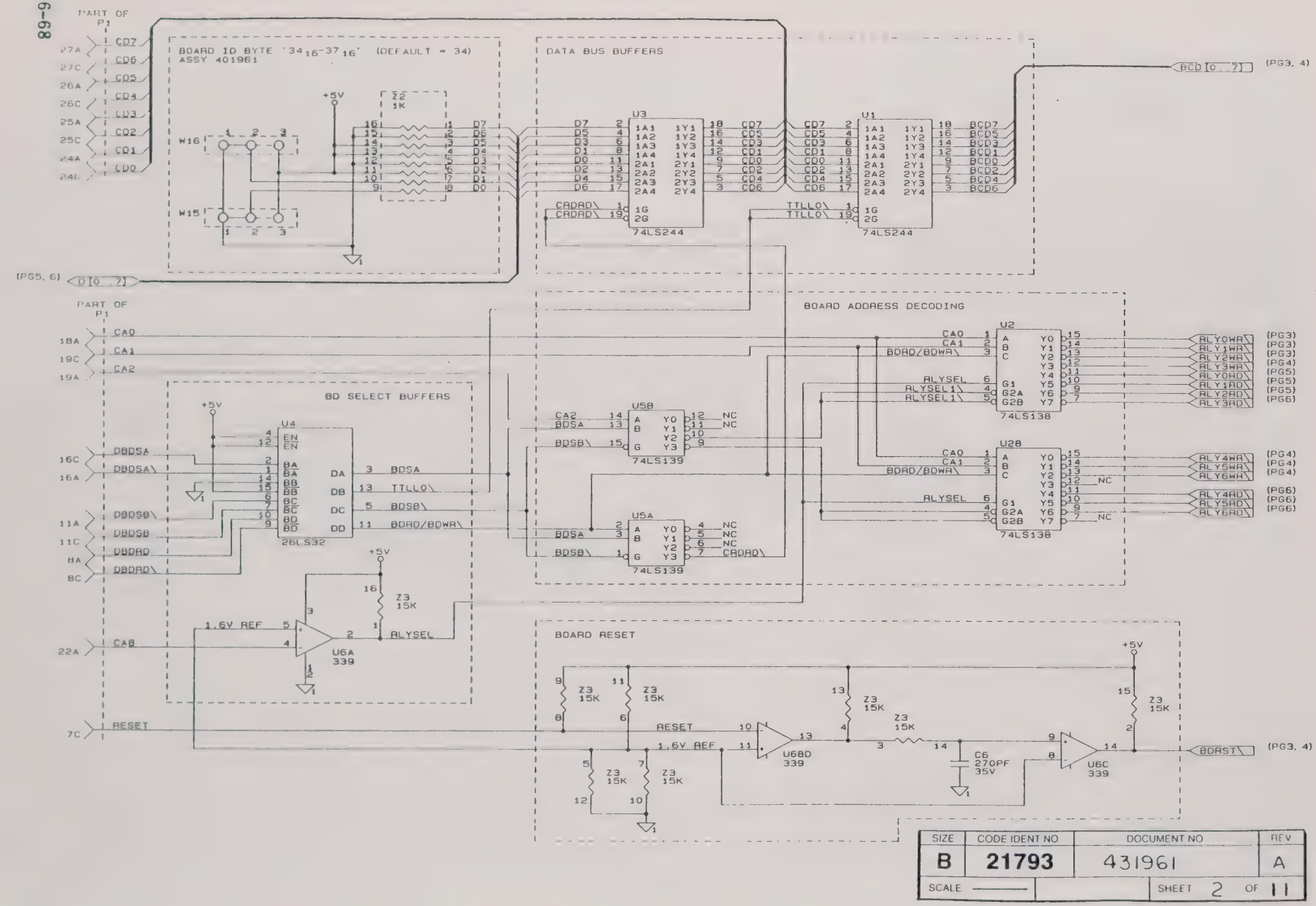
SCALE ——— SHEET 1 OF 11



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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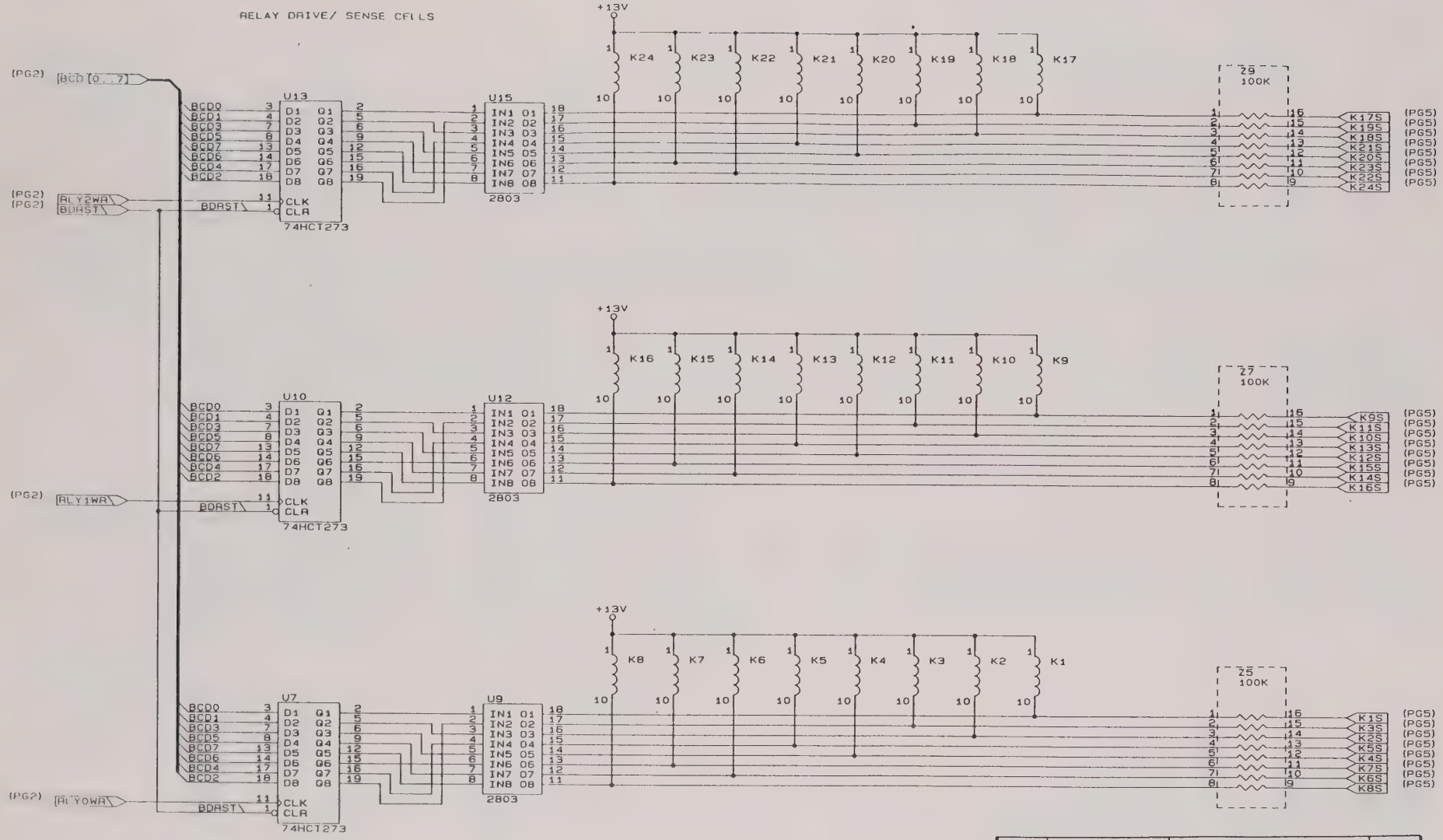

SIZE	CODE IDENT NO.	DOCUMENT NO	REV
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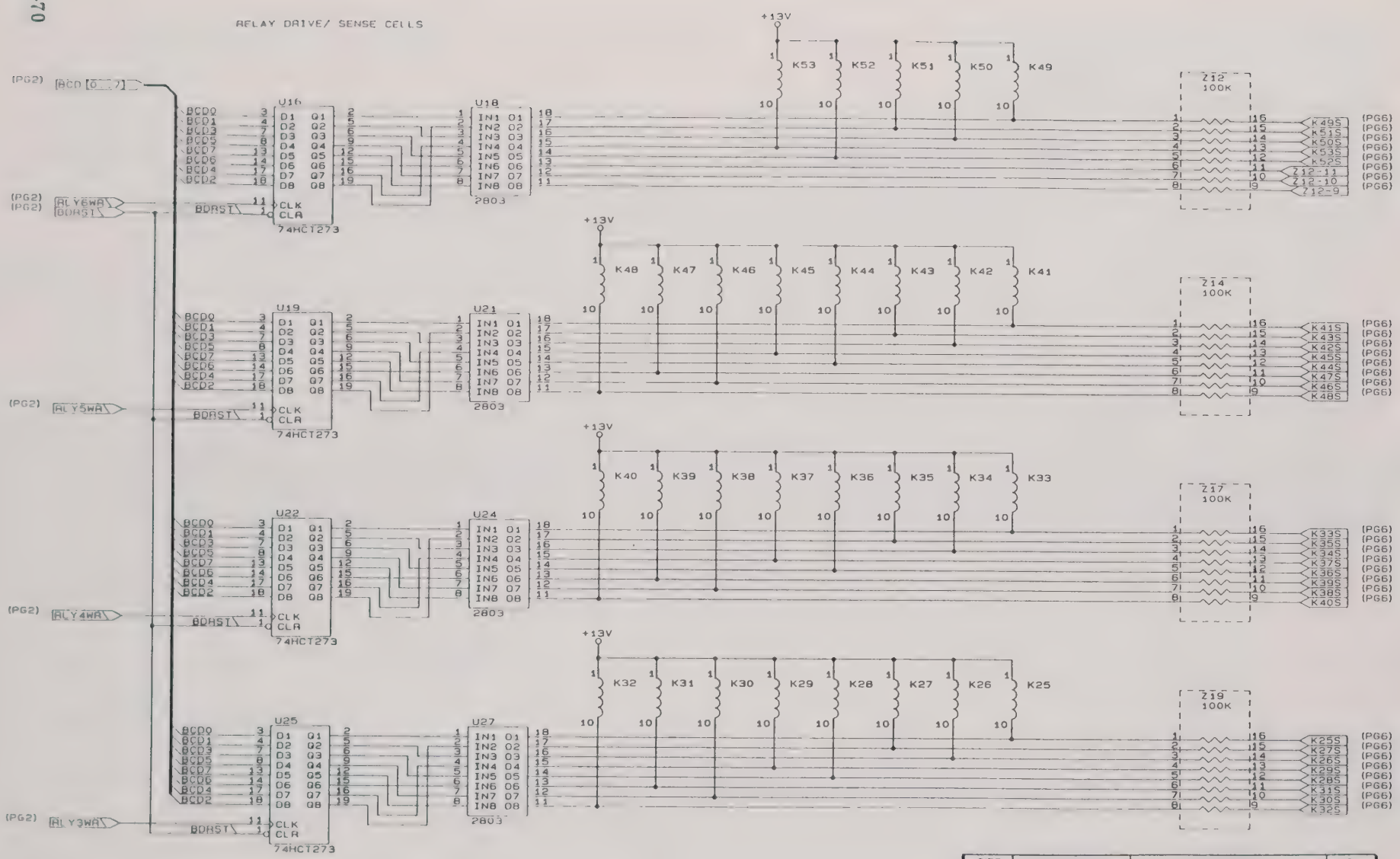
RELAY DRIVE/ SENSE CELLS



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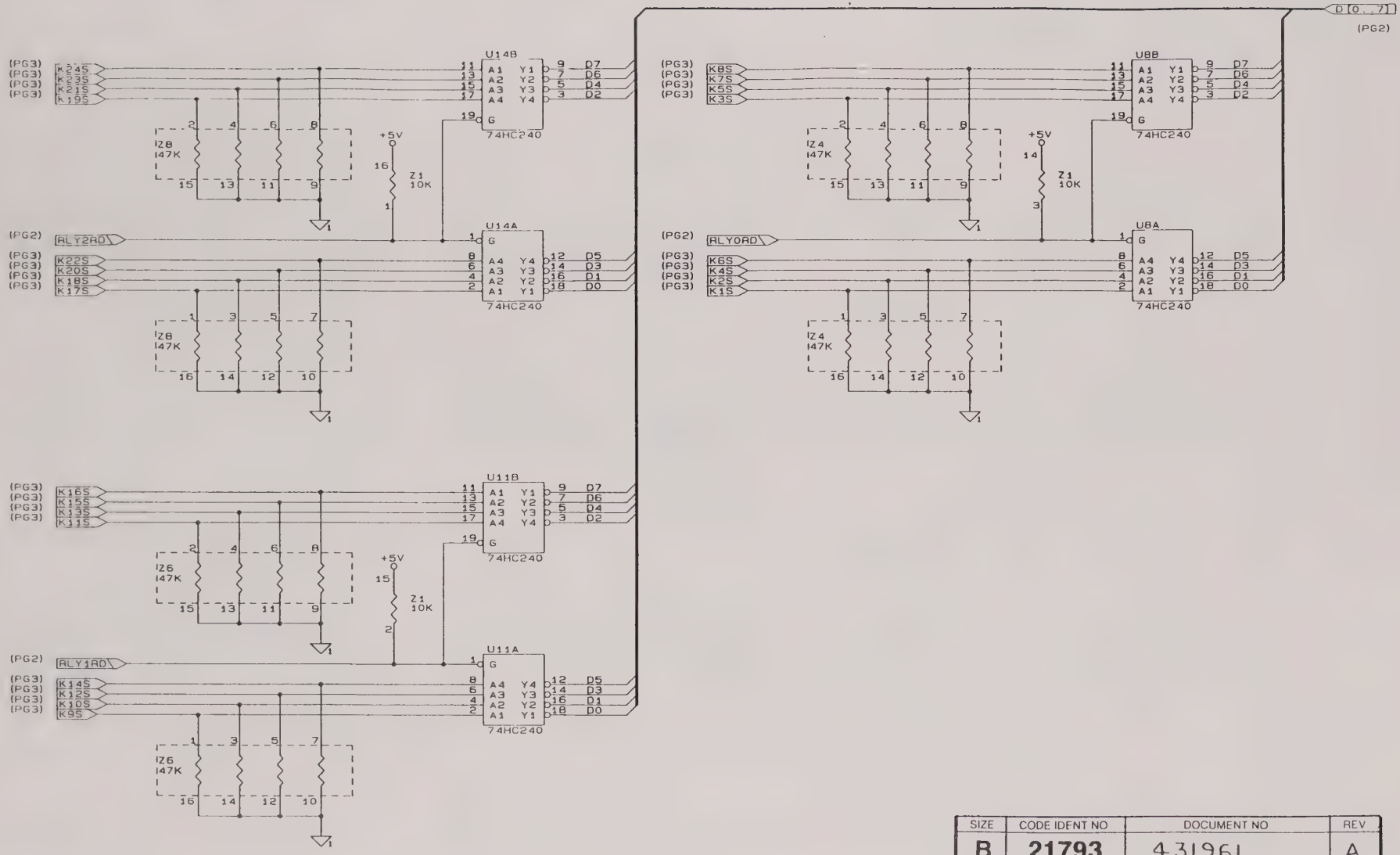
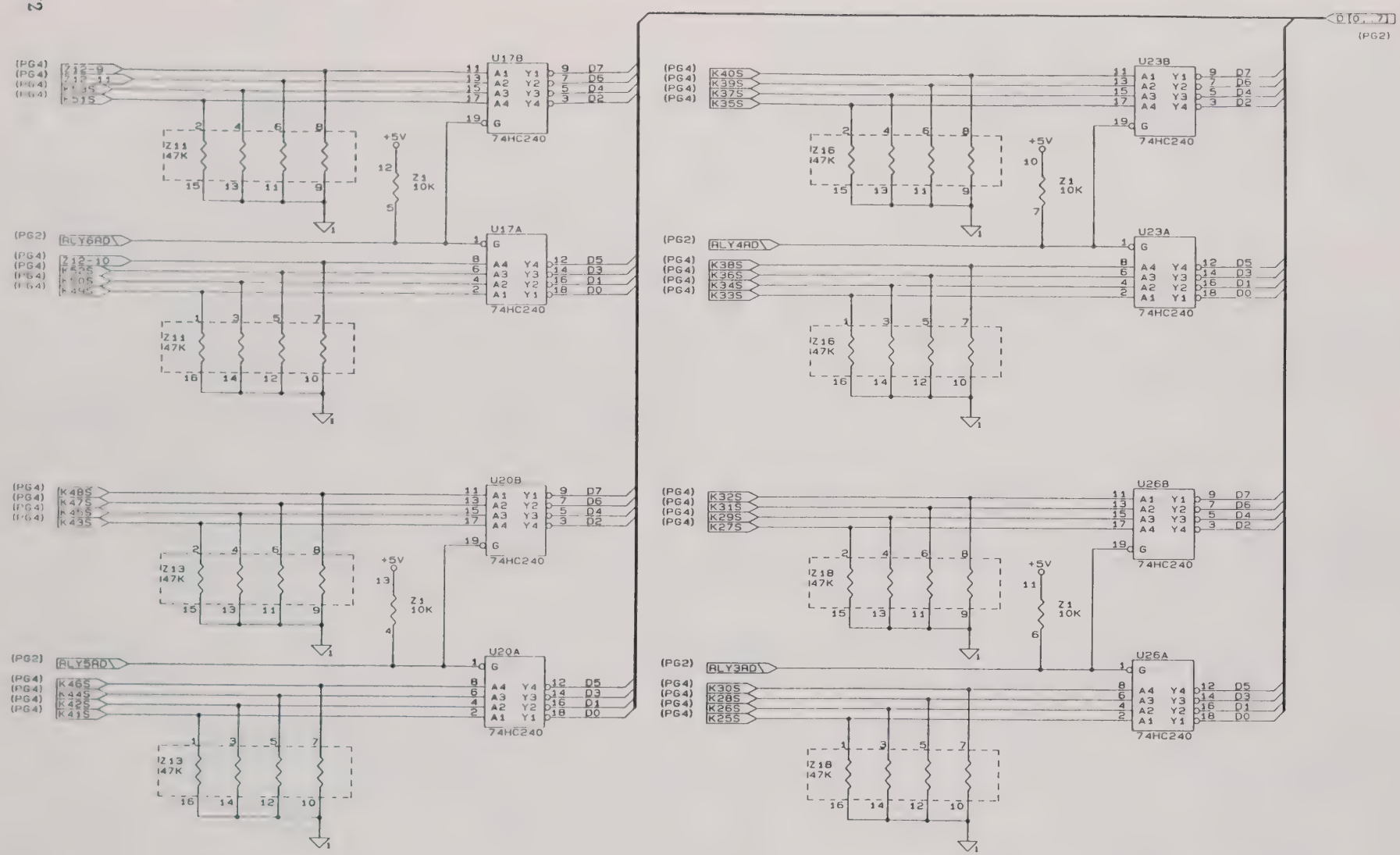
SCALE ———		SHEET 4 OF 11	

RELAY DRIVE/ SENSE CELLS



SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431961	A
SCALE		SHEET 5 OF 11	

RELAY DRIVE/ SENSE CELLS



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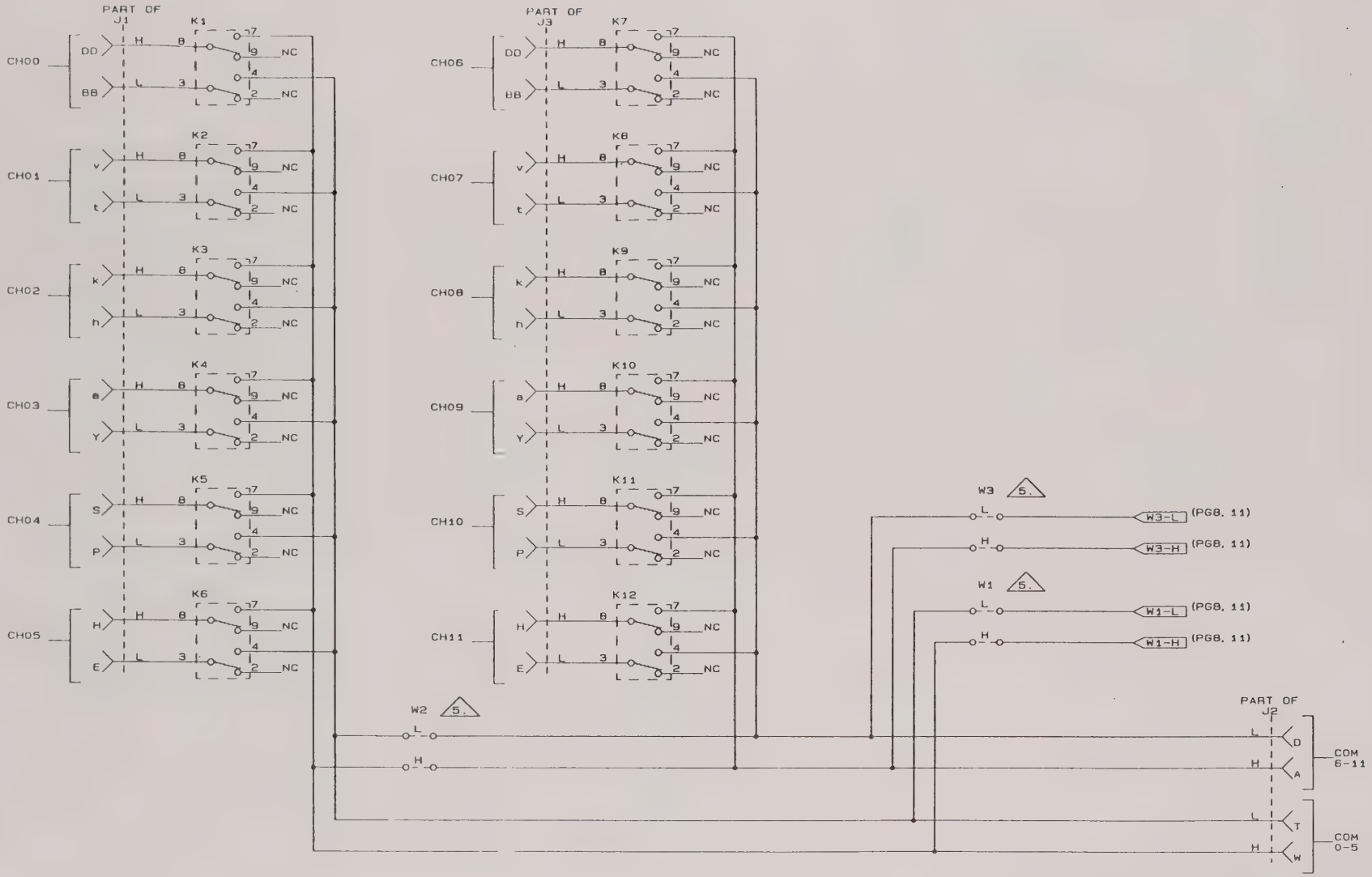
SCALE		SHEET 6 OF 11	



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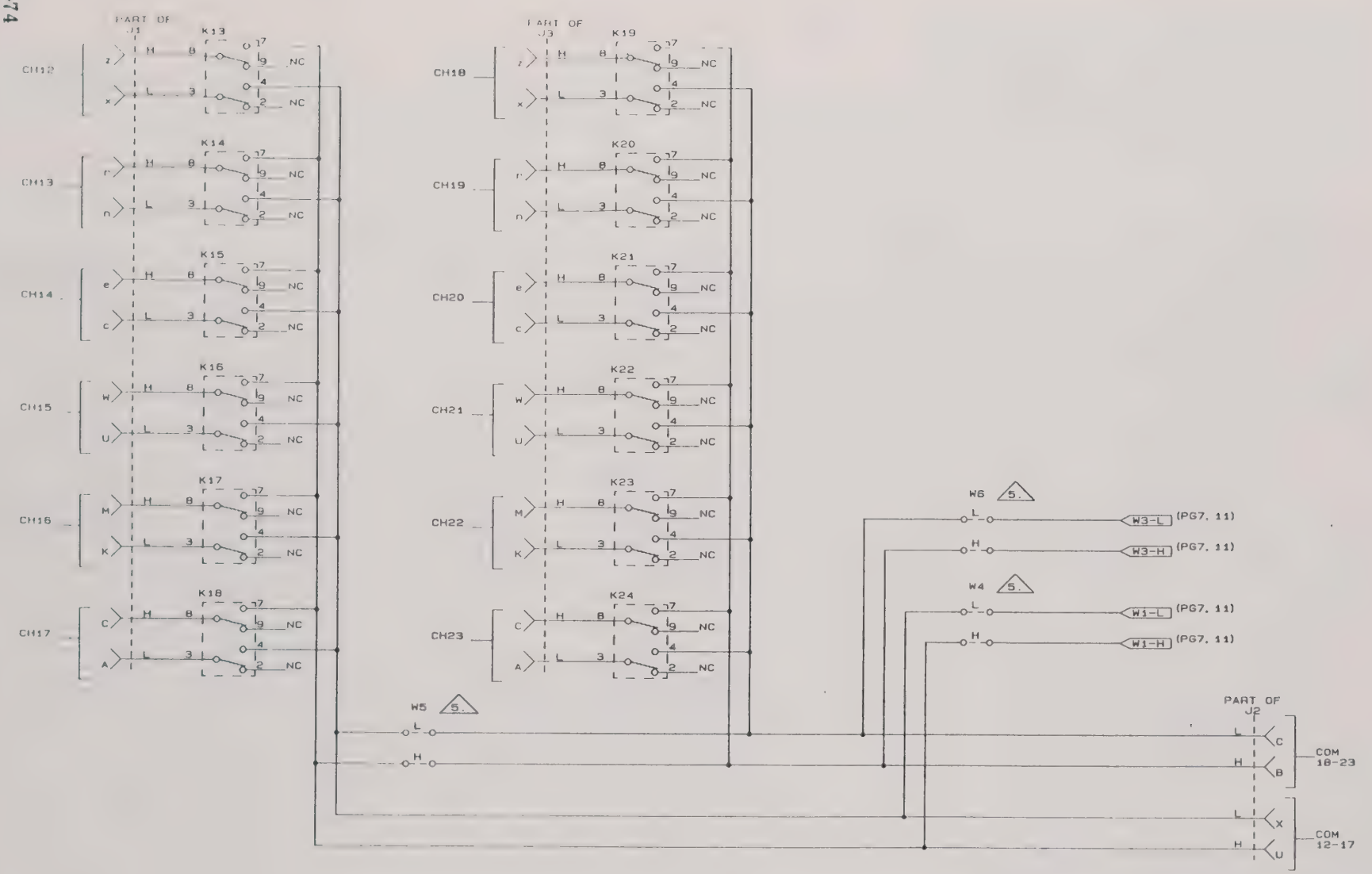

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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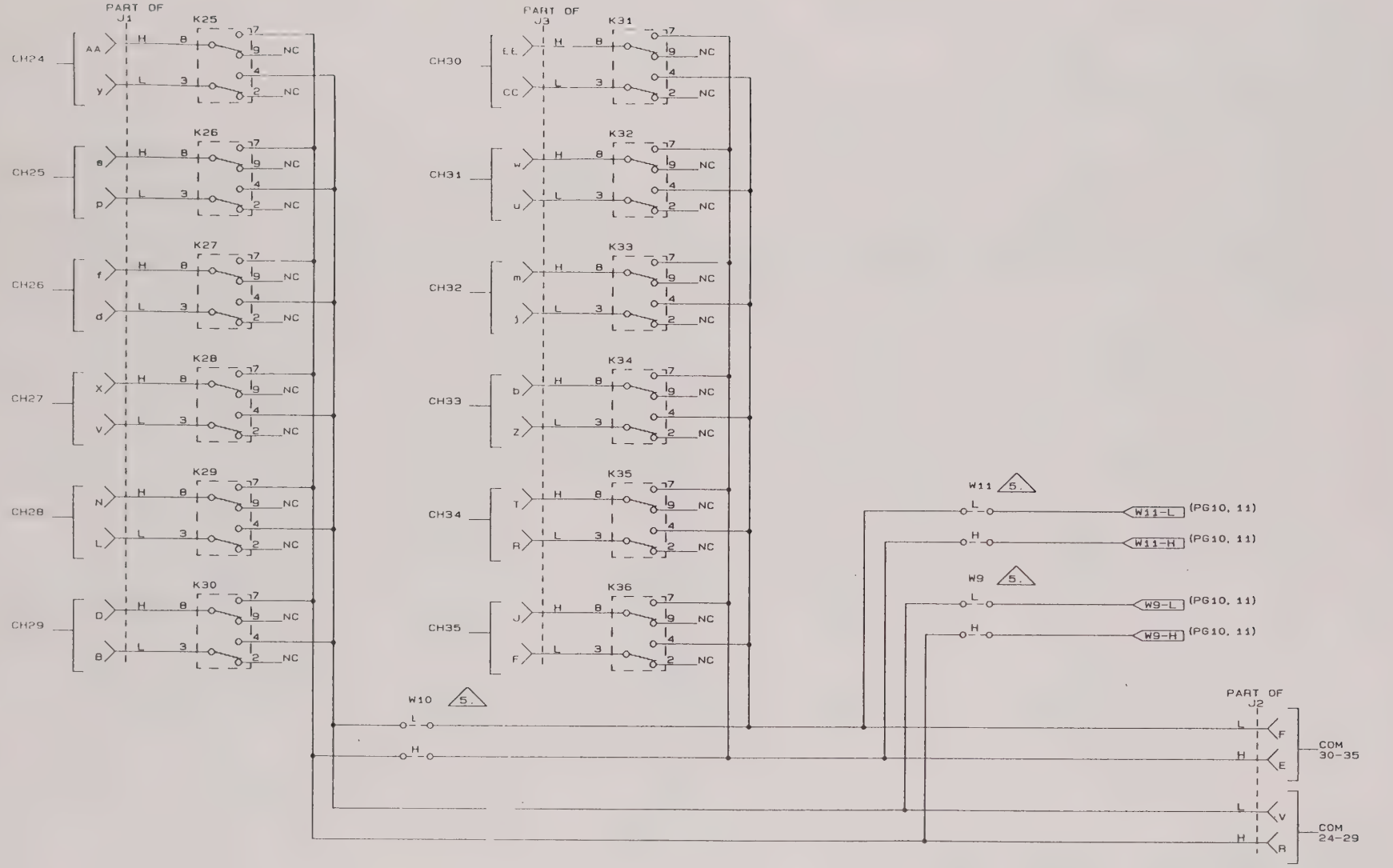

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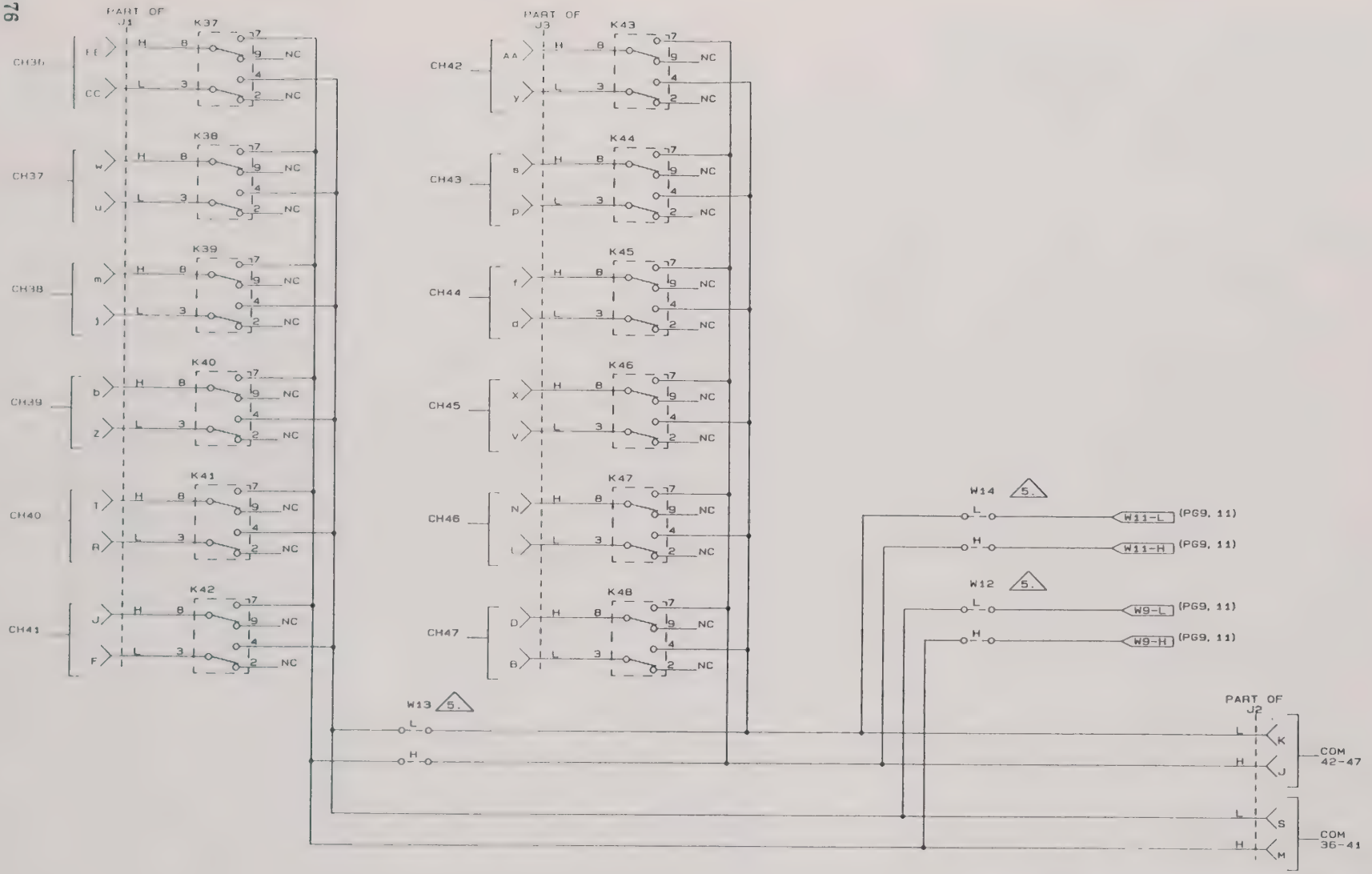
SCALE		SHEET 9 OF 11	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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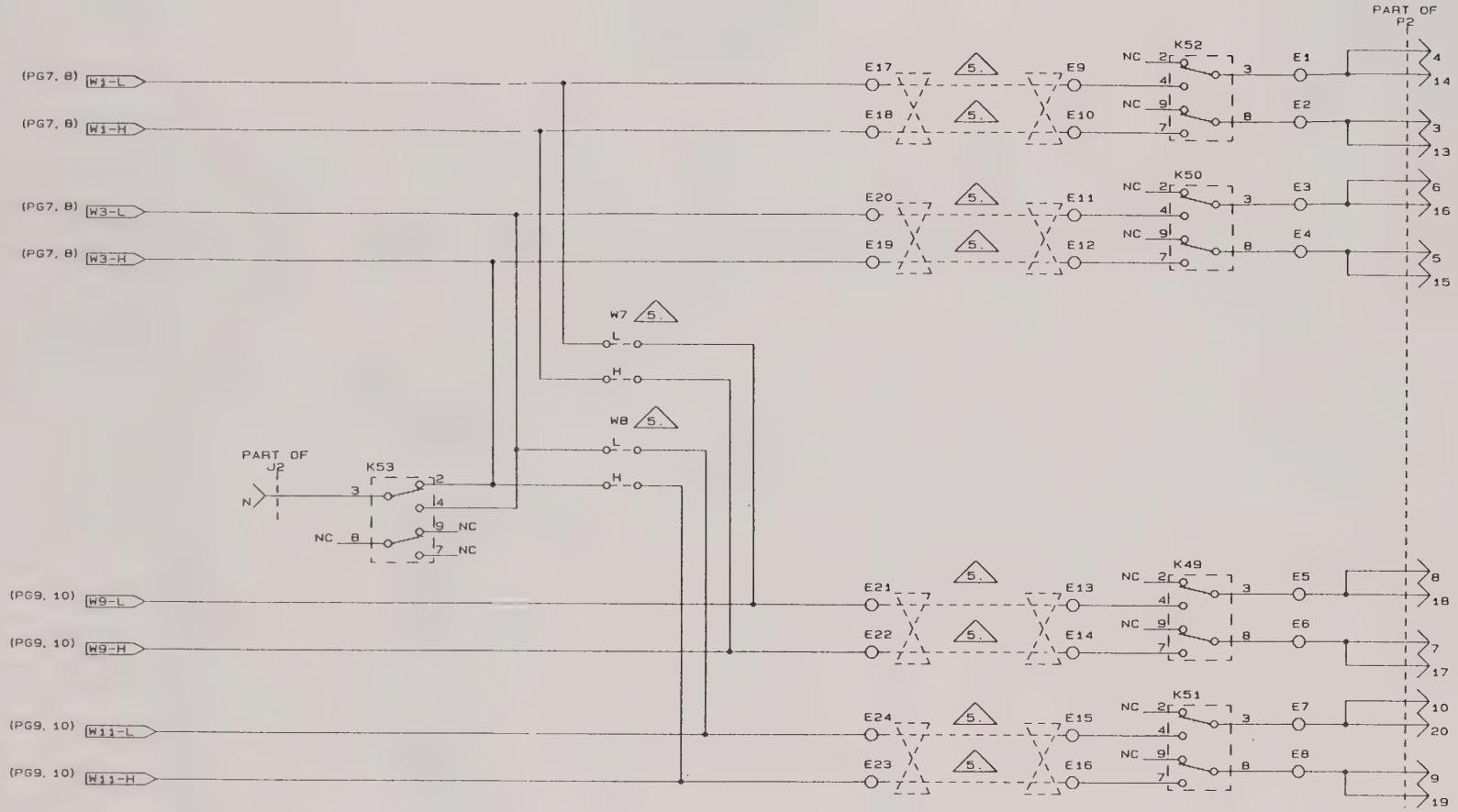
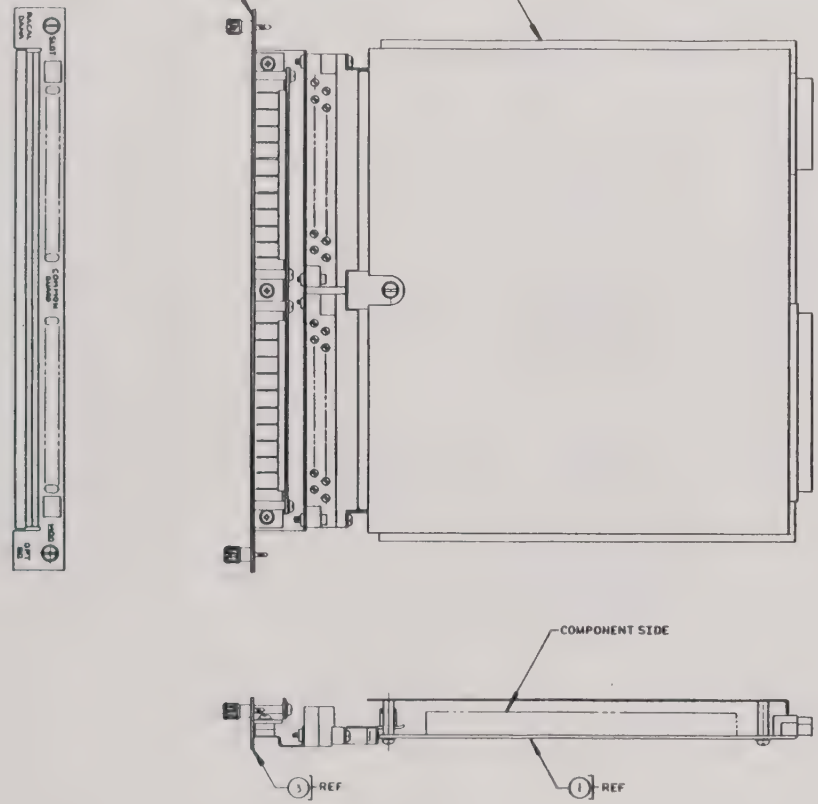
SCALE		SHEET 10 OF 11	



SIZE	CODE IDENT NO.	DOCUMENT NO	REV
B	21793	431961	A
SCALE		SHEET 11 OF 11	



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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: MTRX MOD ASSY, OPT. 40

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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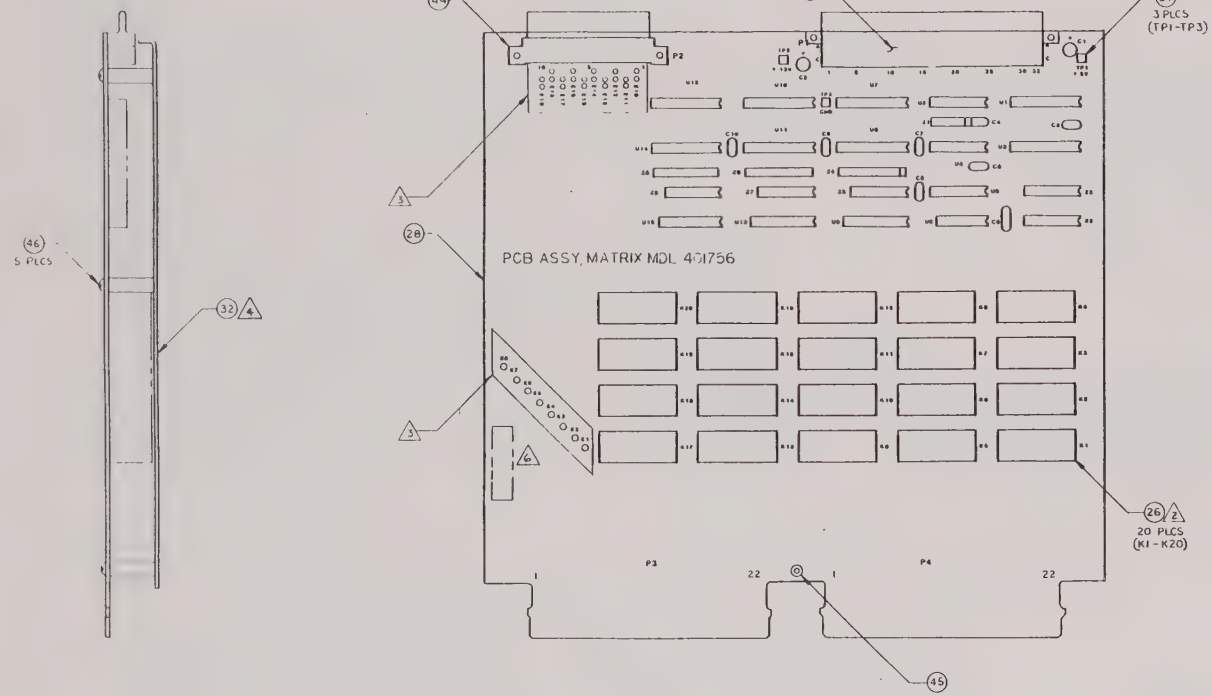
SCALE —— SHEET 1 OF 2

DOC NO 404443



6 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

5 PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.

4 INSTALL SHIELD AFTER BOARD TEST.

3 HOLES IN THIS AREA MUST BE FREE TO SOLDER

2 CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.

1. REF. SCHEMATIC 431756

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

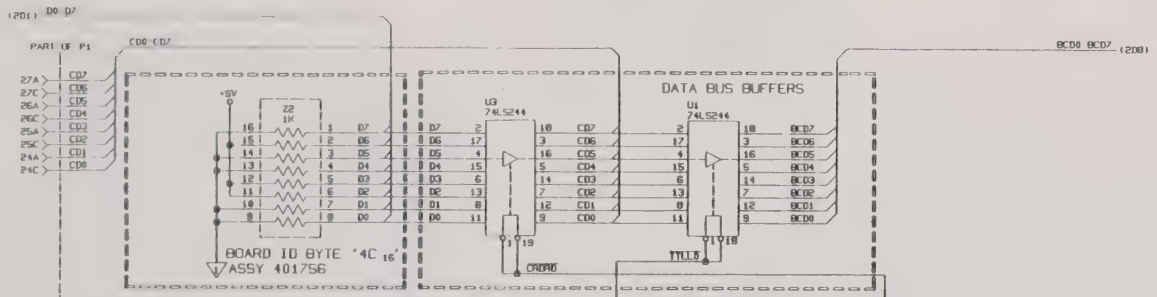
DOCUMENT TITLE: PCB ASSY, MATRIX MDL

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401756	E

SCALE None | SHEET 1 OF 3

DOC NO 401756

6-79


DATA BUS BUFFERS
BOARD ID BYTE '4C'16
ASSY 401756
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
PART OF P1
UNUSED
TYP 20 PLCS FOR K1-K20
RELAY TOP VIEW
TYP 20 PLCS K1-K20
UNUSED GATE TIED TO GROUND
PROPRIETARY NOTICE
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REF DES	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9,12,15	2803A		10		9
U8,11,14	74HC240	20		10	
U7,10,13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	

IC POWER CONNECTIONS

REF. DES.	TYPE	PINS
Z9	47K	9
Z6	47K	9
Z4	47K	9
Z1	10K	2,3

UNUSED LOGIC & NETWORKS

Z9	
U15	
TP3	
P4	
K20	
C19	E9
C10	
HIGHEST	NOT USED

REF. DESIGNATIONS

3. RELAYS K1 THRU K20 ARE RACAL DANA P/N 310170.
   ALL RELAYS SHOWN IN DE-ENERGIZED POSITION
2. RESISTOR NETWORKS ARE IN OHMS ±2%
1. CAPACITOR VALUES ARE IN MICROFARADS ±10%,100V UNLESS OTHERWISE SPECIFIED.

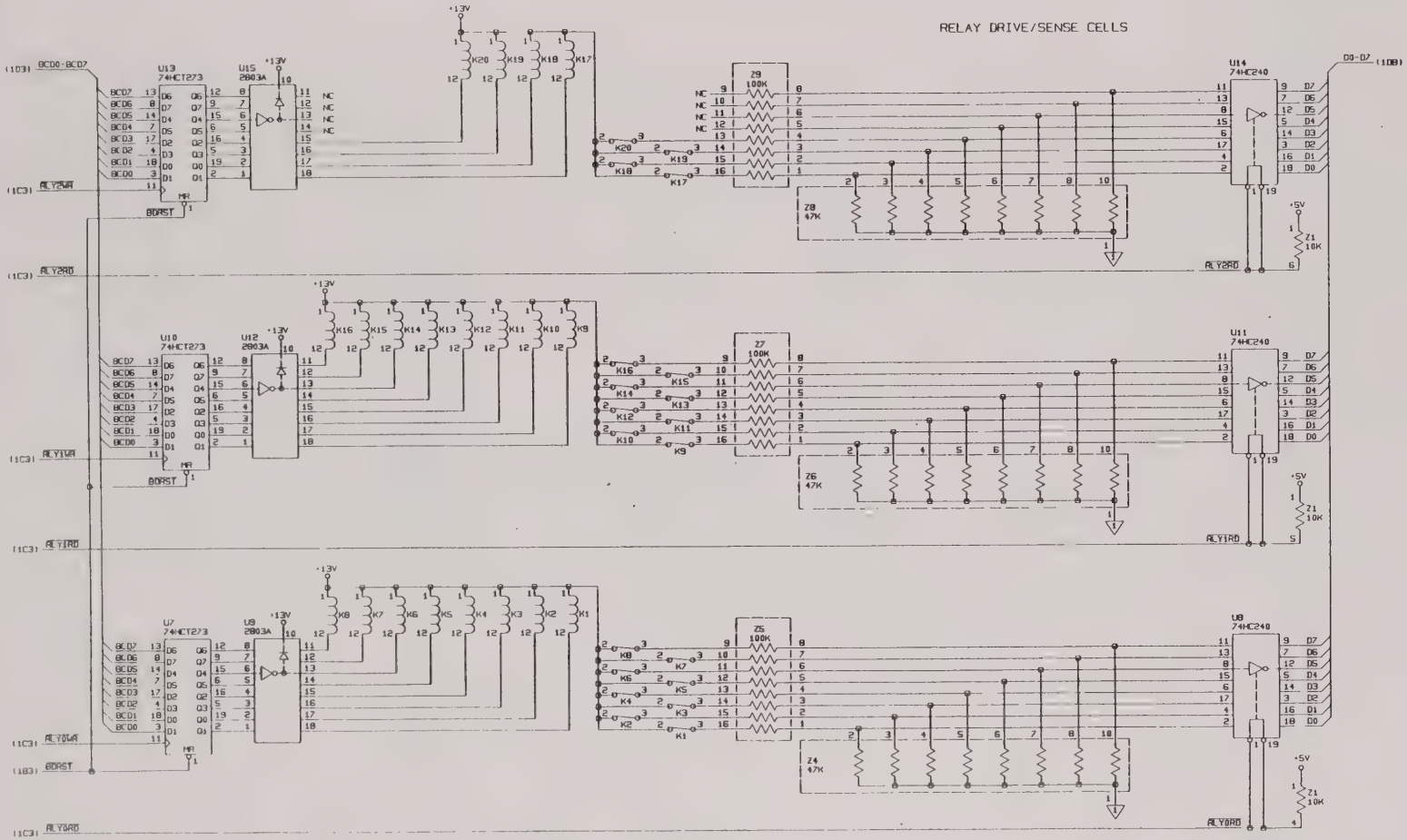
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE
SCHEM., MATRIX MODULE

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
D	21793	431756	A

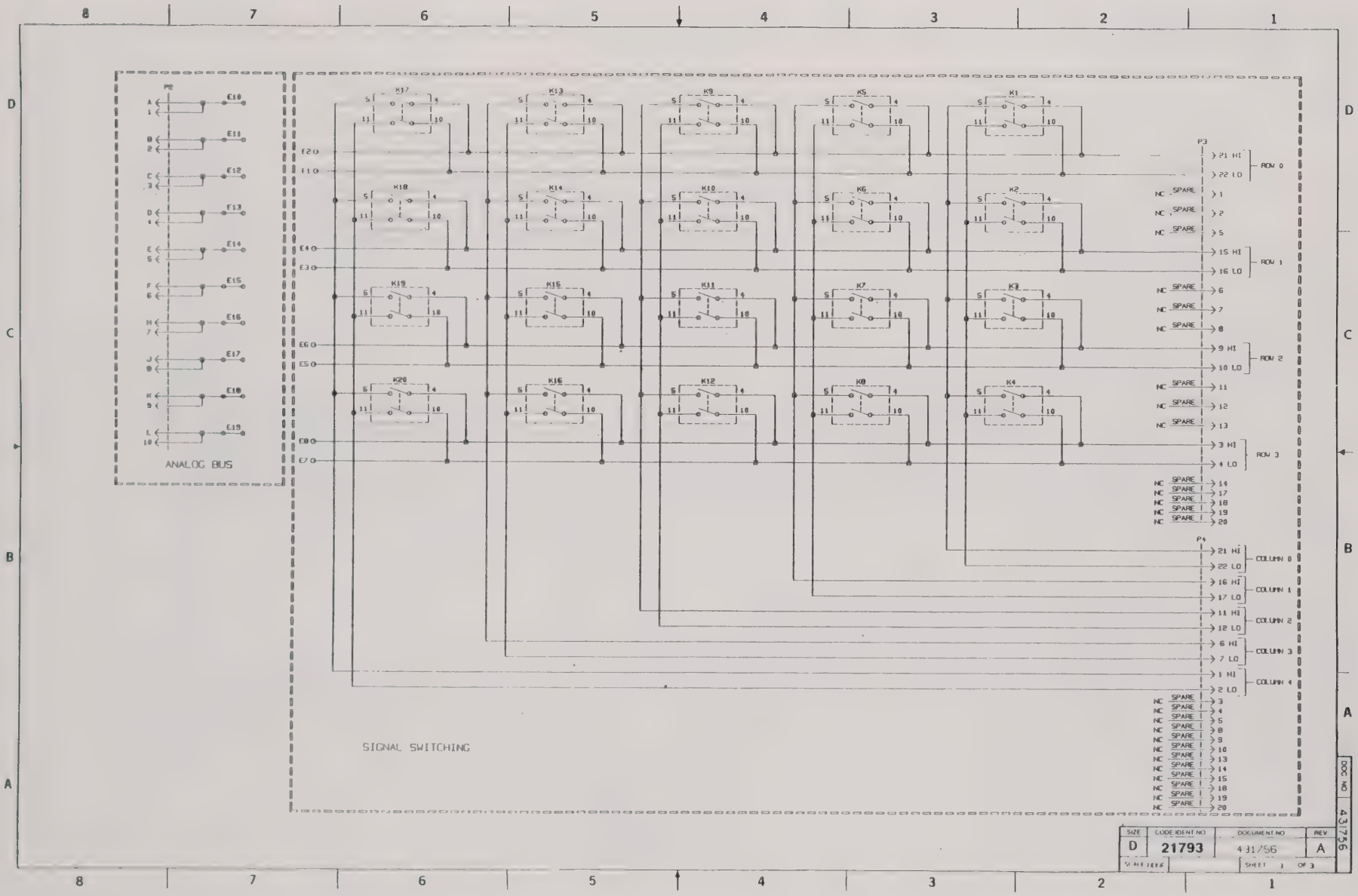
SCALE NONE | SHEET 1 OF 3

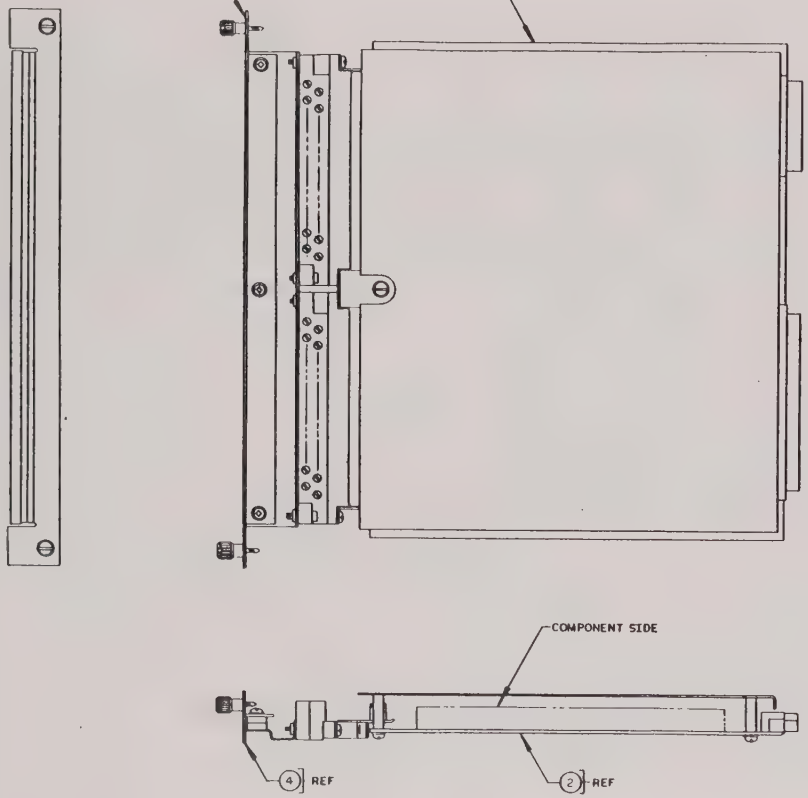
DOC NO 431756



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431756	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431756


P2
ANALOG BUS
SIGNAL SWITCHING
P3
P4
ROW 0
ROW 1
ROW 2
ROW 3
COLUMN 0
COLUMN 1
COLUMN 2
COLUMN 3
COLUMN 4
SPARE
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431/56
REV A
SHEET 3 OF 3



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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: MTRX MOD ASSY, OPTL40

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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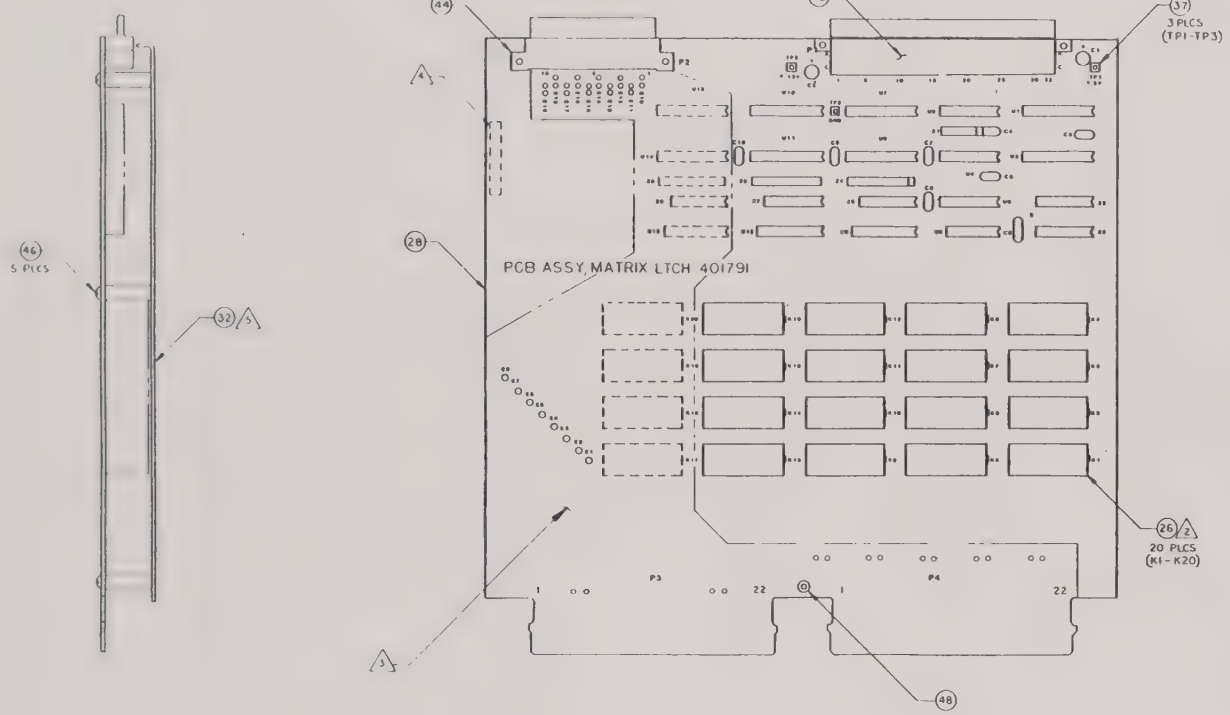
SCALE —— SHEET 1 OF 2

DOC NO 404457



5 SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY

4 INK STAMP SERIAL NO APPROX WHERE SHOWN, COMP SIDE.

3 HOLES IN THIS AREA MUST BE FREE FROM SOLDER

2 CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE

1. REF. SCHEMATIC 431791

NOTES UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

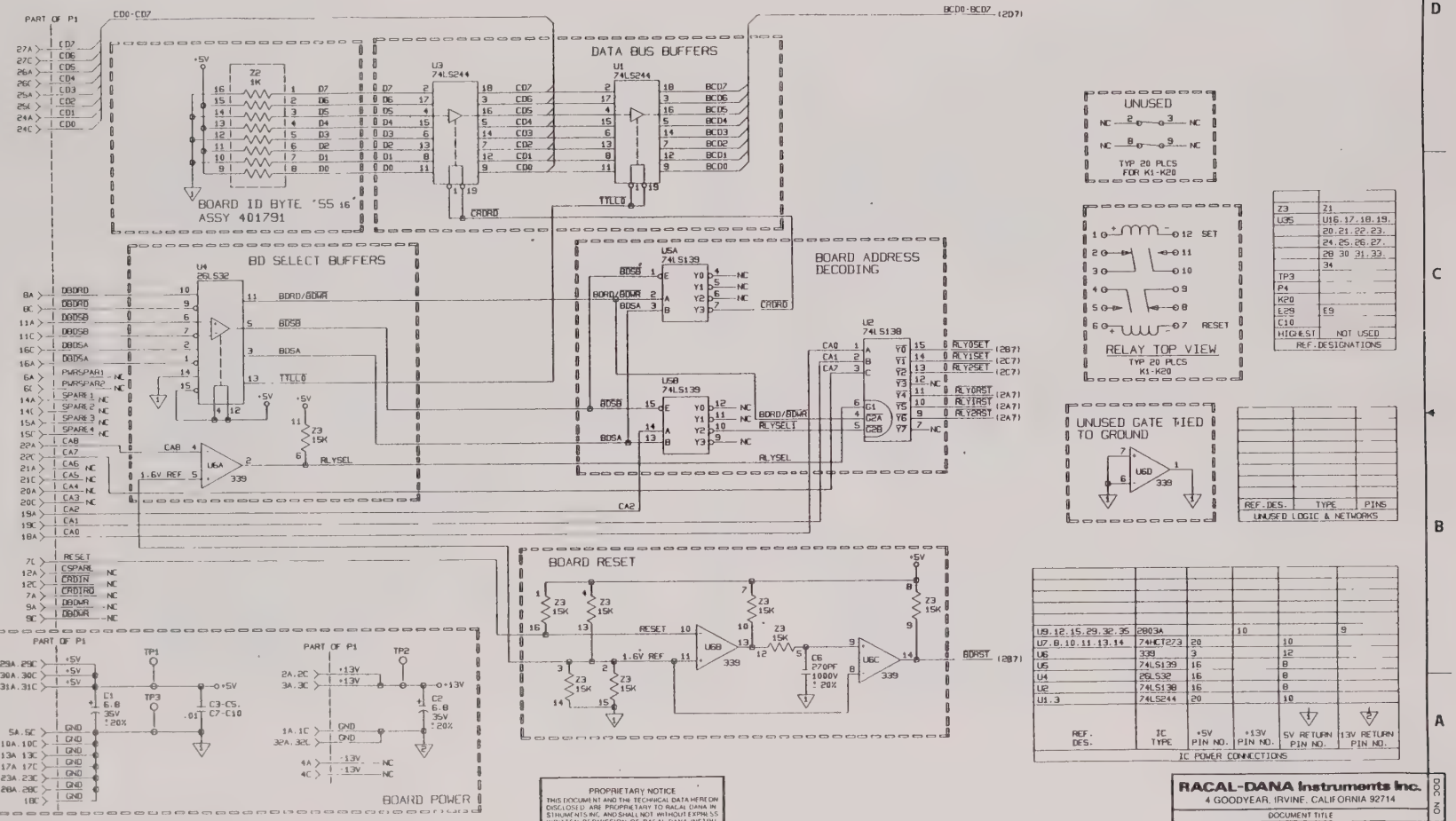
DOCUMENT TITLE

PCB ASSY, MATRIX LTCH

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401791	A

SCALE 6.0x | SHEET 1 OF 3

DO NOT SCALE 401791



Z3	Z1
U95	U16.17.18.19.
	20.21.22.23.
	24.25.26.27.
	29 30 31.33.
	34
TP3	
P4	
K20	
E29	E9
C10	
HIGHEST	NOT USED

REF.DESIGNATIONS

REF.DES.	TYPE	PINS

UNUSED LOGIC & NETWORKS

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9.12.15.29.32.35	2803A		10		9
U7.8.10.11.13.14	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1.3	74LS244	20		10	

IC POWER CONNECTIONS

4 PARTS INDICATED WITH 4 ARE NOT INSTALLED.

3. RELAYS K1 THRU K20 ARE RACAL DANA P/N 310181. ALL RELAYS SHOWN IN DE ENERGIZED POSITION.
2. RESISTOR NETWORKS ARE IN OHMS. ±2%
1. CAPACITOR VALUES ARE IN MICROFARADS. ±10%,100V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

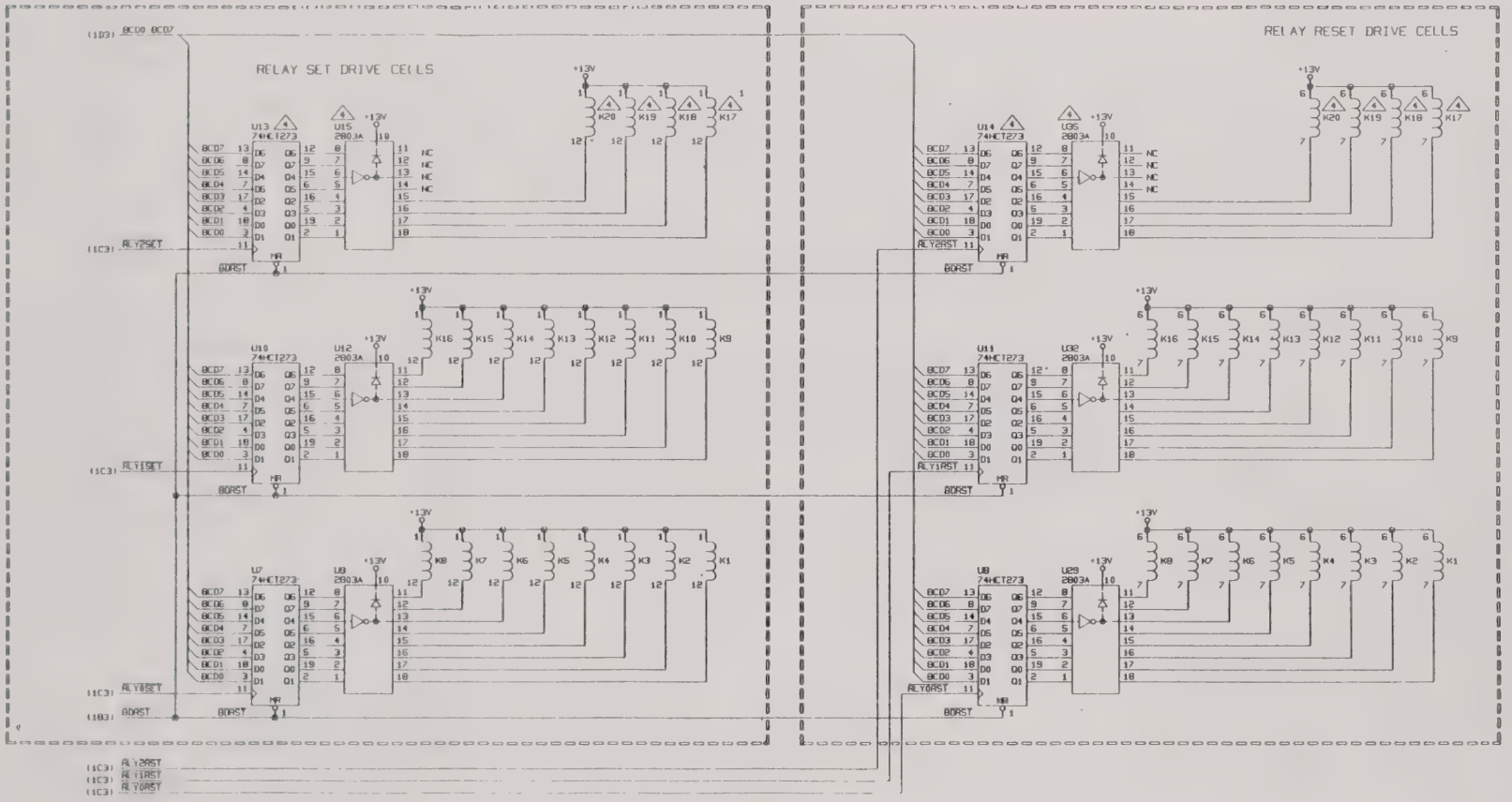
DOCUMENT TITLE
SCHEM. MATRIX LATCH

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431791	A

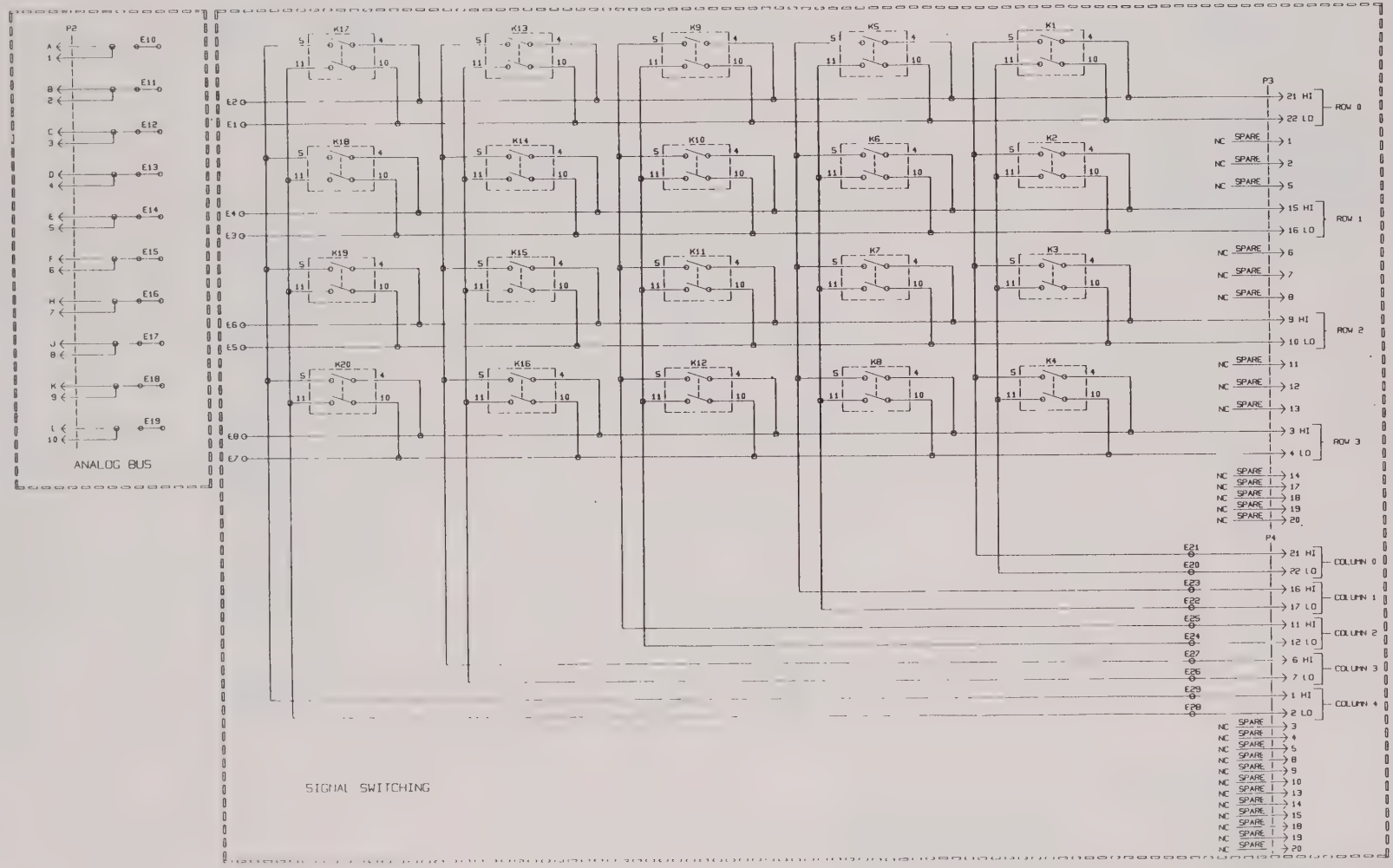
SCALE NONE SHEET 1 OF 3

DOC NO 431791

6-85



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431791	A
SCALE NONE		SHEET 2 OF 3	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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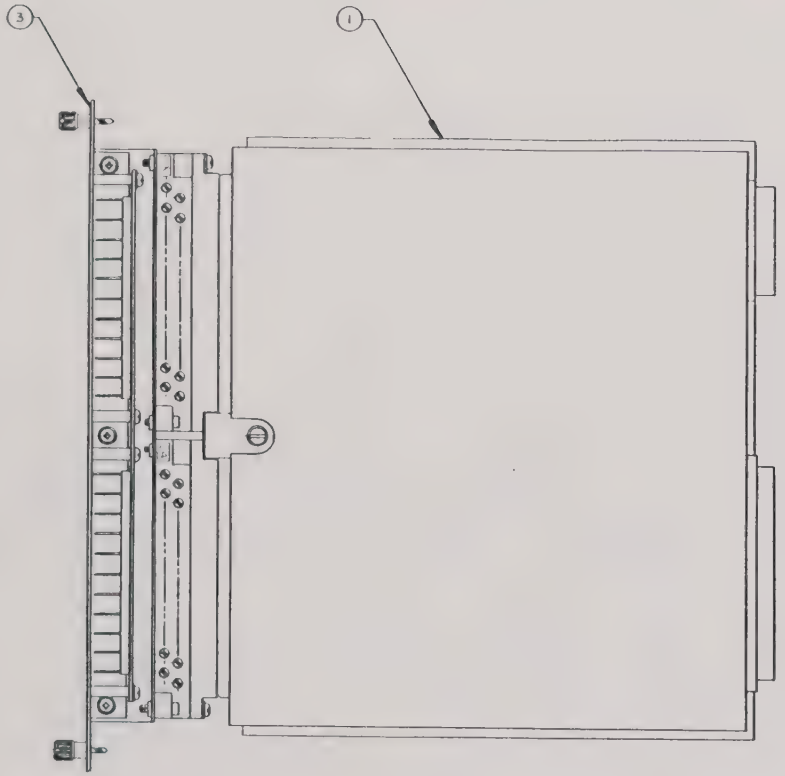
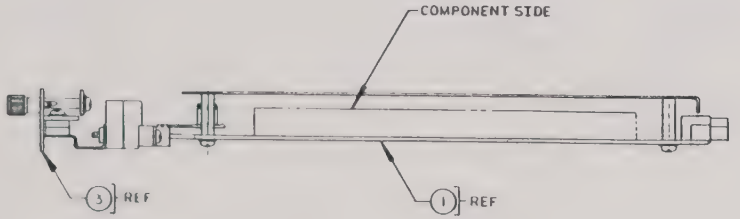
SCALE NONE		SHEET 3 OF 3	

431791

6-87





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RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
OPT. ASSY, 1250-40B			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
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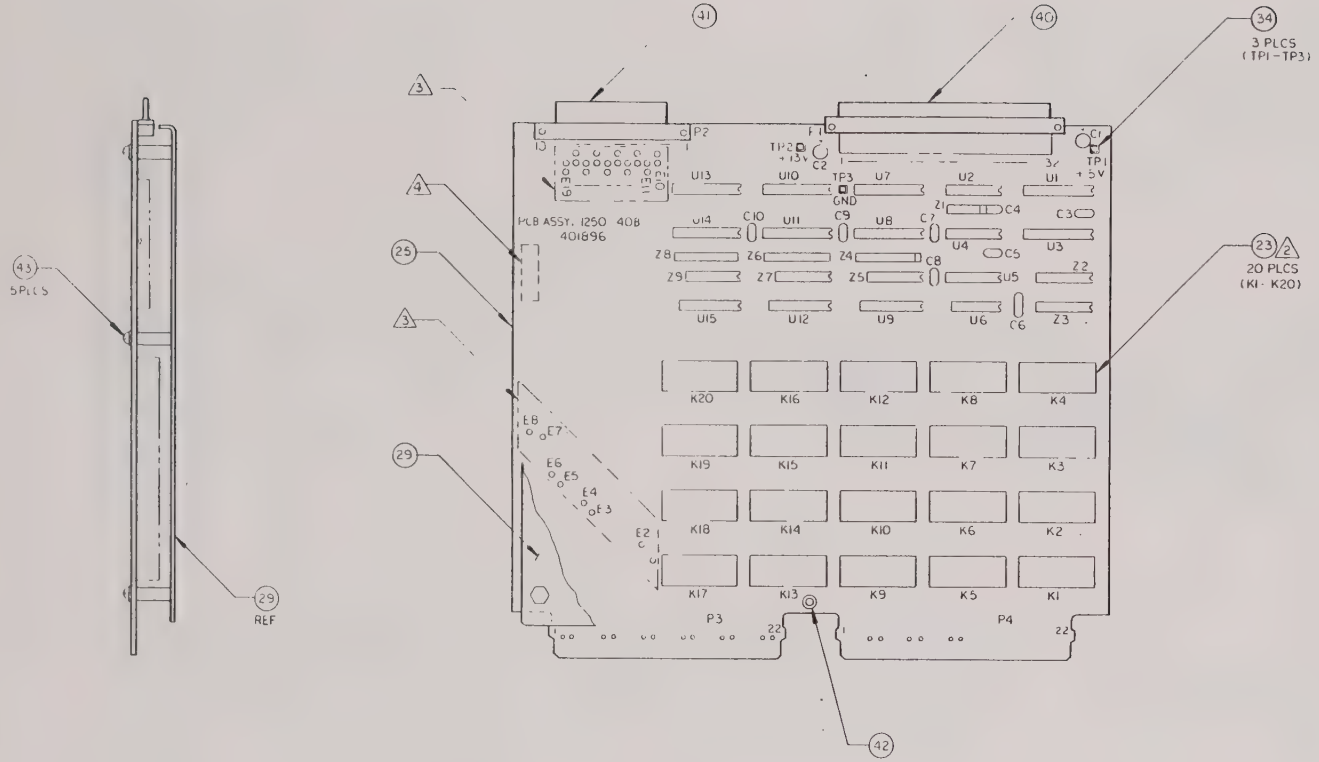
SCALE —		SHEET 1 OF 2	



3 INK STAMP SERIAL NO. APPROX. WHERE SHOWN COMP SIDE

3 HOLES IN THIS AREA MUST BE FREE FROM SOLDER

2 CAUTION. DO NOT USE THE FOLLOWING CLEANING DETERGENT: FREON TMC, ALPHA 564, TRICHLOROETHANE.

1. REF SCHEMATIC 431896

NOTES UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

PCB ASSY, 1250-40B

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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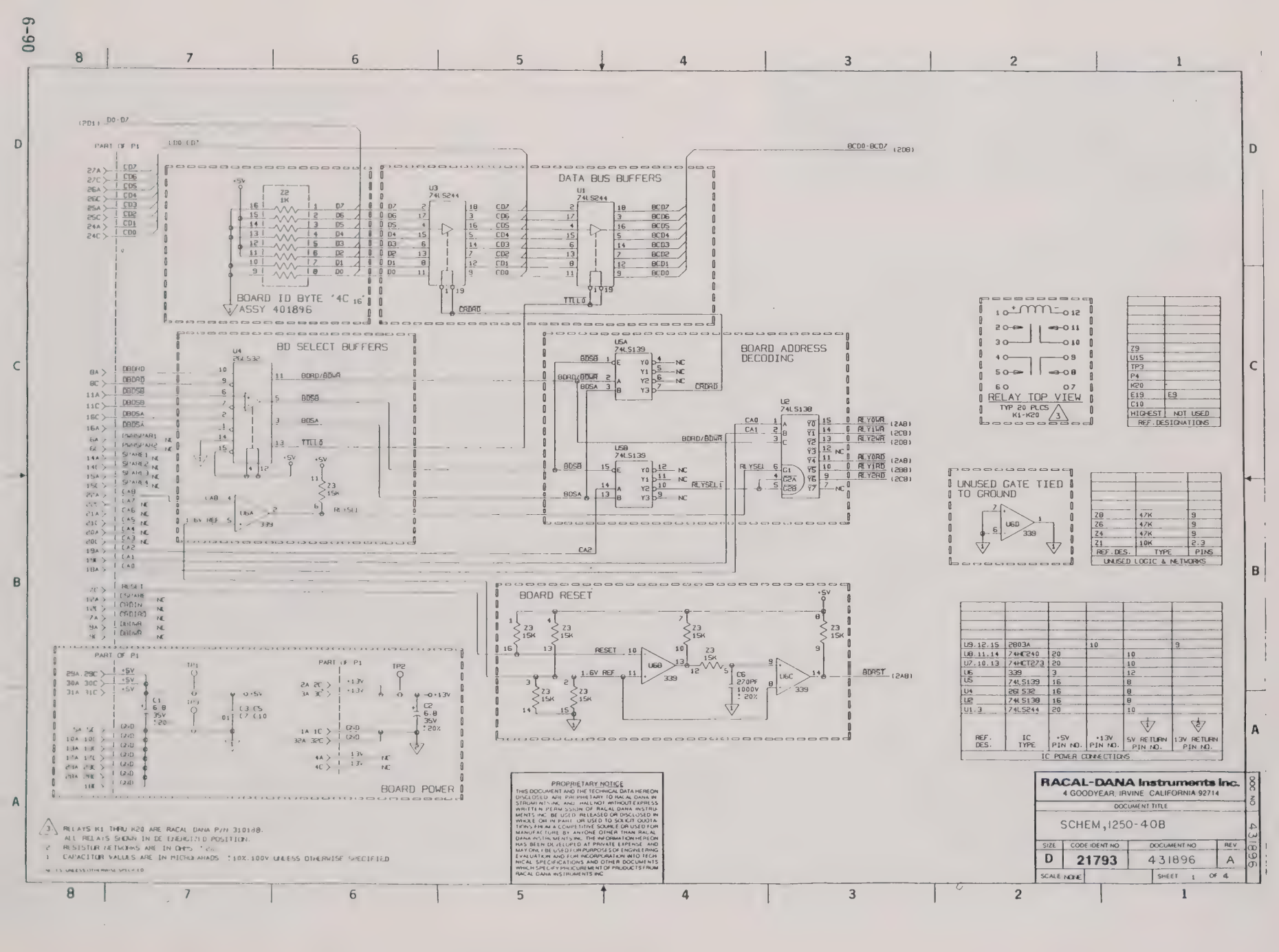
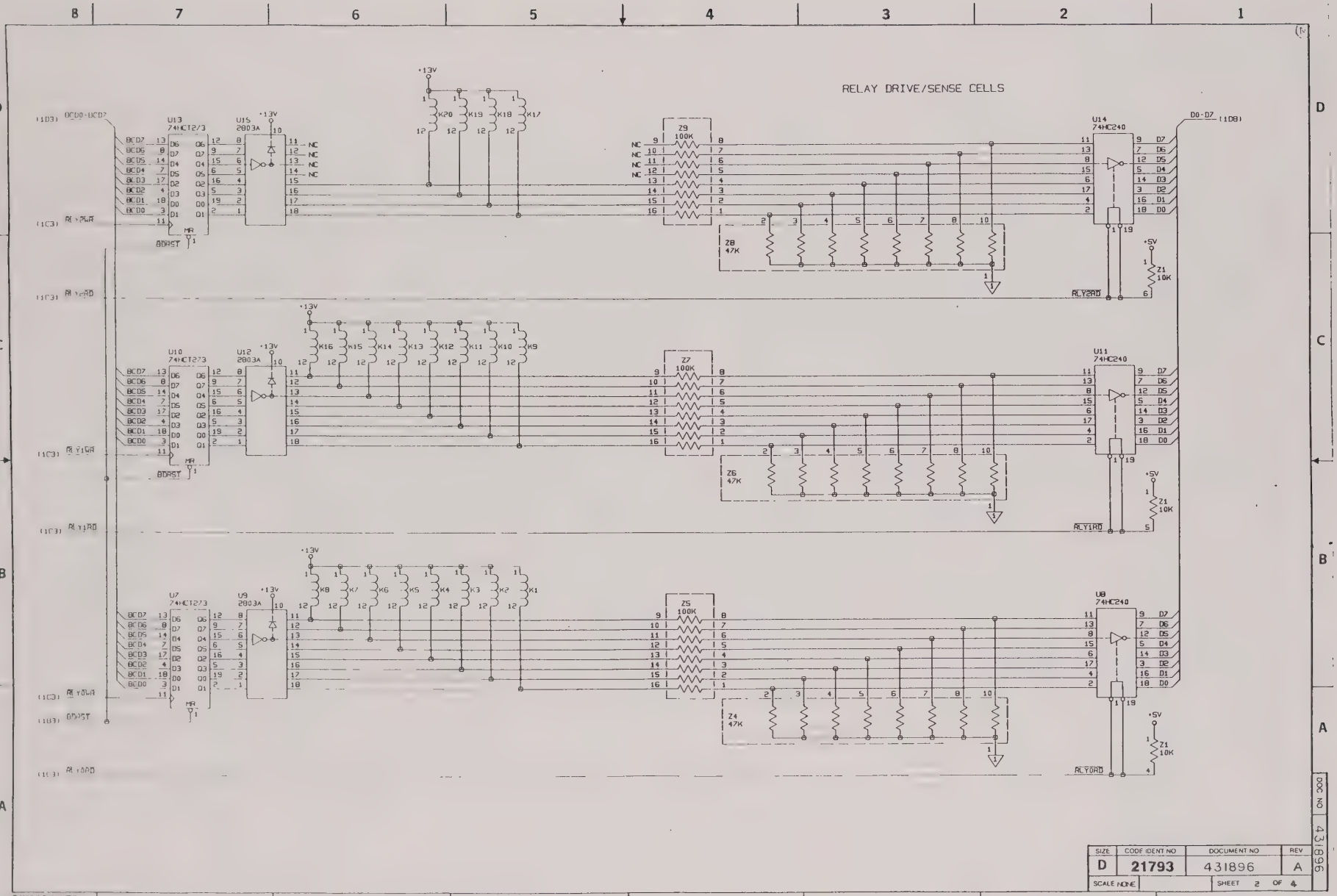
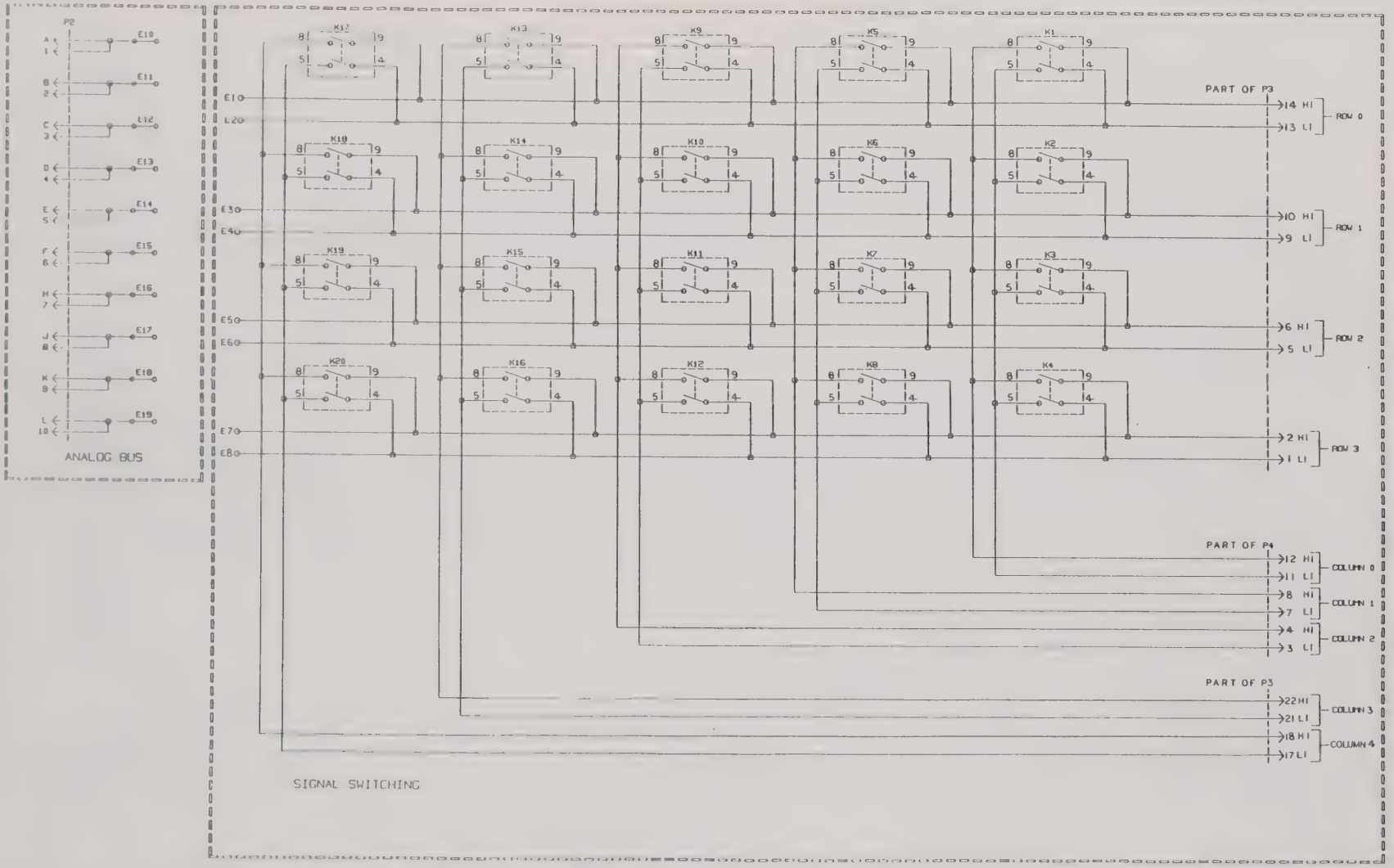
SCALE —		SHEET 1 OF 2	


DATA BUS BUFFERS
BOARD ID BYTE '4C 16
ASSY 401896
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
RELAY TOP VIEW
TYP 20 PLCS K1-K20
UNUSED GATE TIED TO GROUND
IC POWER CONNECTIONS
UNUSED LOGIC & NETWORKS
REF.DESIGNATIONS
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714
SCHEM,1250-408
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431896
REV A
SCALE NONE
SHEET 1 OF 4


RELAY DRIVE/SENSE CELLS
U13 74HCT2/3
U15 2803A
U10 74HCT273
U12 2803A
U7 74HCT273
U9 2803A
U14 74HC240
U11 74HC240
U8 74HC240
Z9 100K
Z8 47K
Z7 100K
Z6 47K
Z5 100K
Z4 47K
Z1 10K
+13V
+5V
BCD0-BCD7
D0-D7
BDRST
RLY2WR
RLY2RD
RLY1WR
RLY1RD
RLY0WR
RLY0RD
SIZE
CODE IDENT NO
21793
DOCUMENT NO
431896
REV
A
SCALE NONE
SHEET 2 OF 4



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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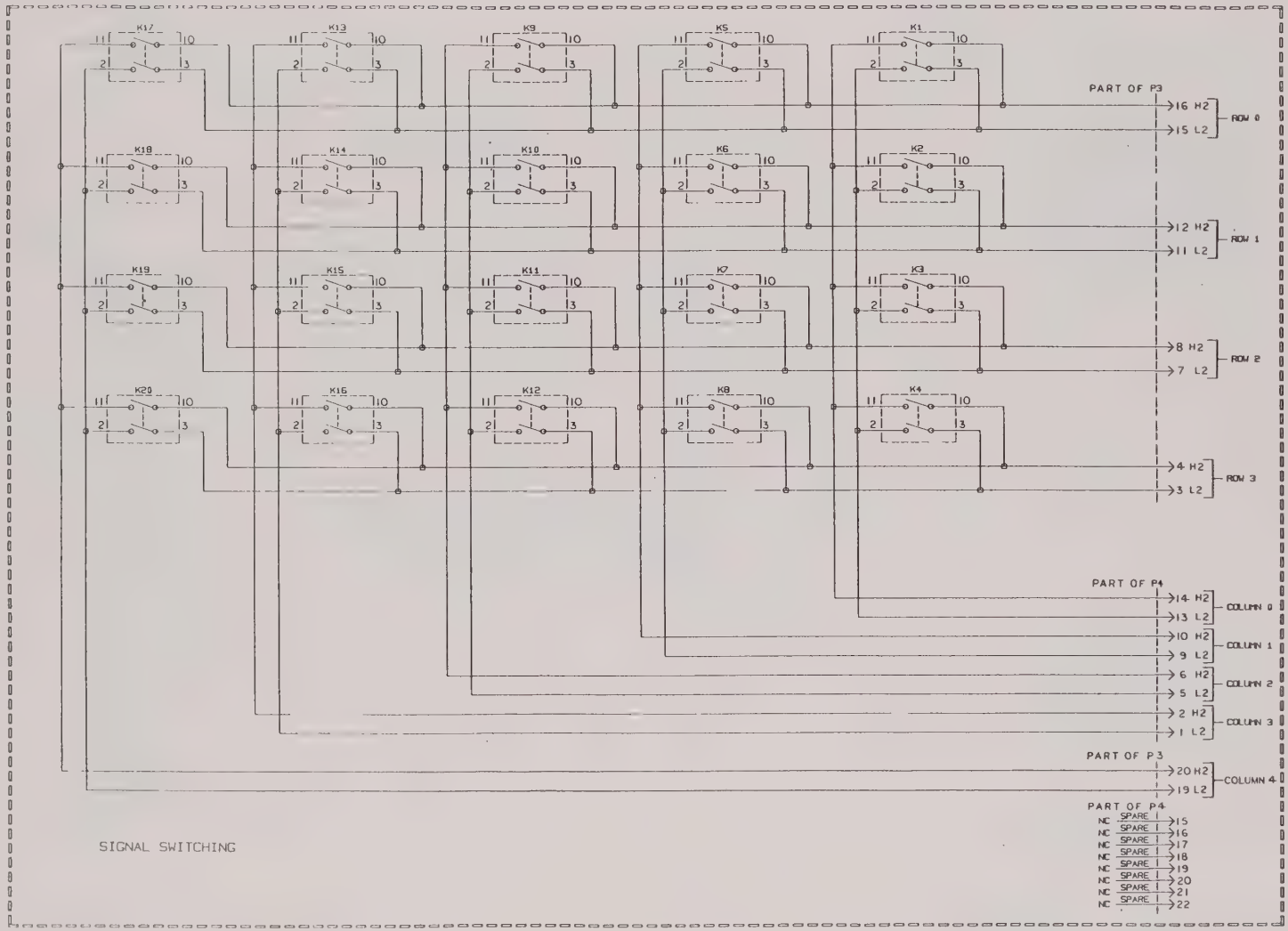
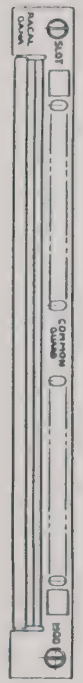
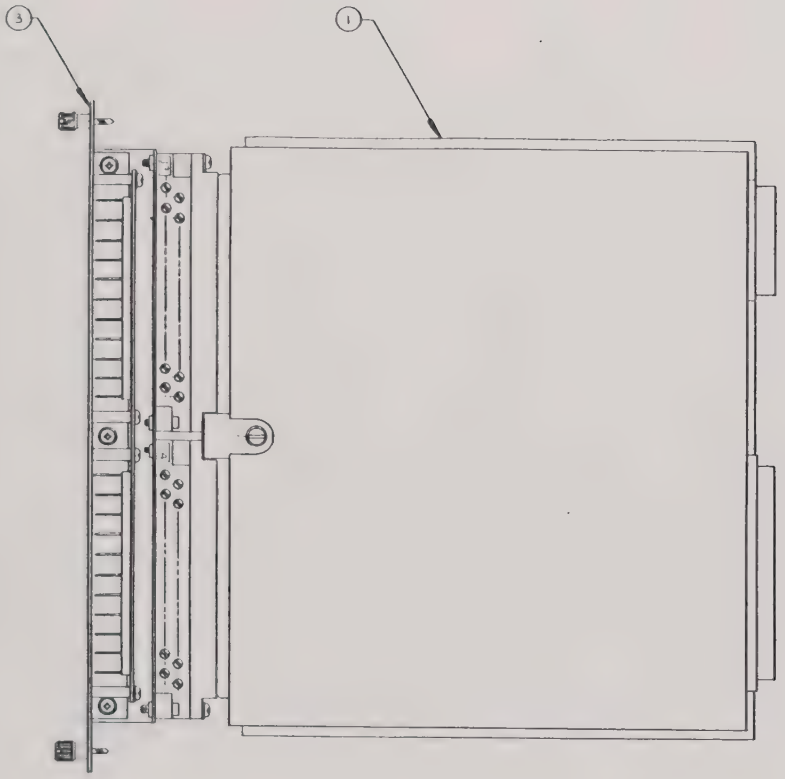
SCALE NONE		SHEET 3 OF 4	

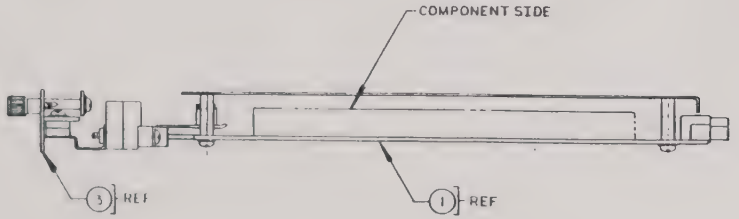
DOC NO 431896



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431896	A
SCALE NONE		SHEET 4 OF 4	







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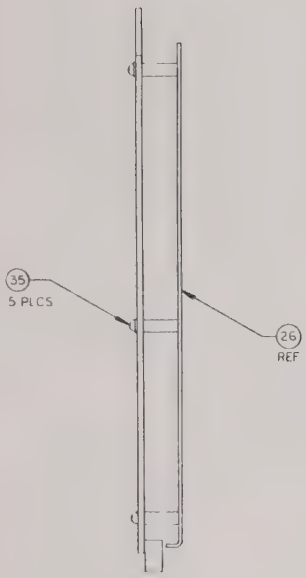
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714

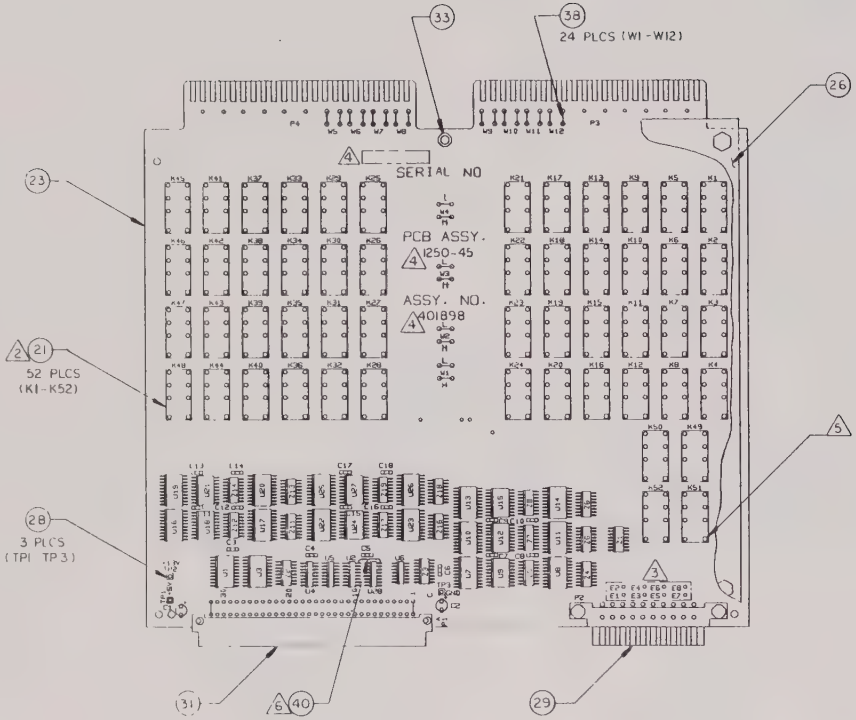
DOCUMENT TITLE

OPT. ASSY, 1250-45

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404712	A

SCALE —— SHEET 1 OF 2





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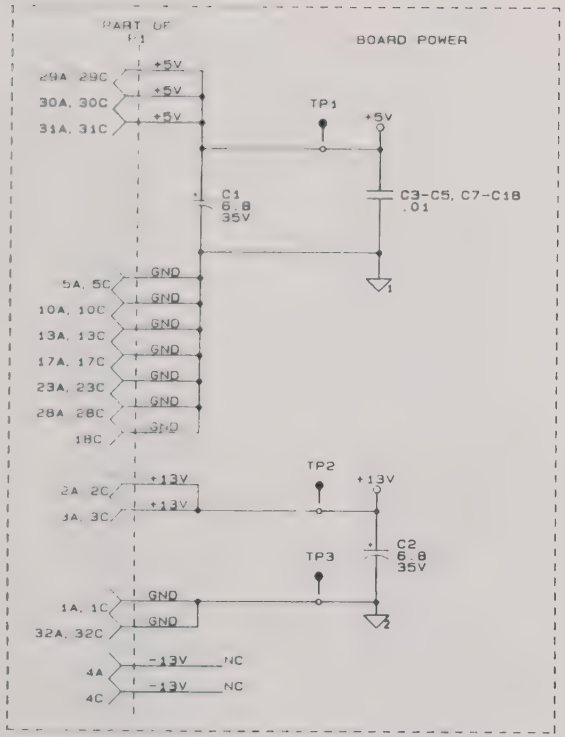
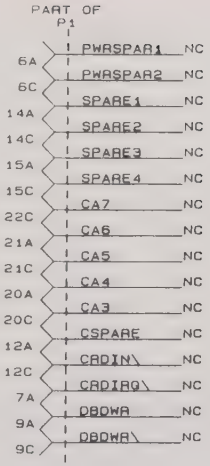
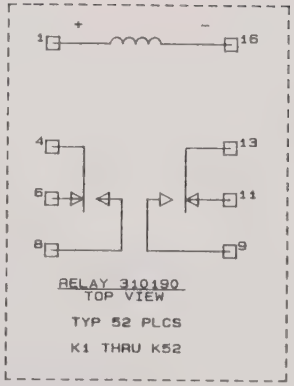
6. INSTALL JUMPER ITEM 40 FROM U2-16 TO U28-16
5. SQUARE PAD INDICATES PIN NO ONE
4. INK STAMP SERIAL NO, PCB ASSY., ASSY NO WHERE SHOWN
3. HOLES IN THIS AREA MUST BE FREE FROM SOLDER
2. CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS FREON TMC, ALPHA564, TRICHLOROETHANE
1. REF SCHEMATIC 431898

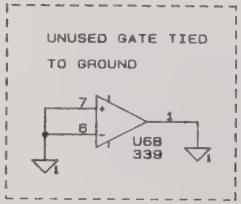
NOTES UNLESS OTHERWISE SPECIFIED

RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE: PCB ASSY, 1250-45			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 401898	REV: A
SCALE: —		SHEET: 1 OF 2	









HIGHEST REF. DES.
Z19
W12
U29
TP3
P4
K52
E8
C18

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15, 18, 21, 24, 27	2803A		10		9
U8, 11, 14, 17, 20, 23, 26	74HC240	20		10	
U7, 10, 13, 16, 19, 22, 25	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2, 28	74LS138	16		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

3. RELAYS K1 THRU K52 ARE RACAL-DANA P/N 310190. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION
2. RESISTOR NETWORKS ARE IN OHMS.
1. CAPACITOR VALUES ARE IN MICROFARADS, +/-20%, 50V UNLESS OTHERWISE SPECIFIED.

NOTES UNLESS OTHERWISE SPECIFIED

PROPRIETARY NOTICE

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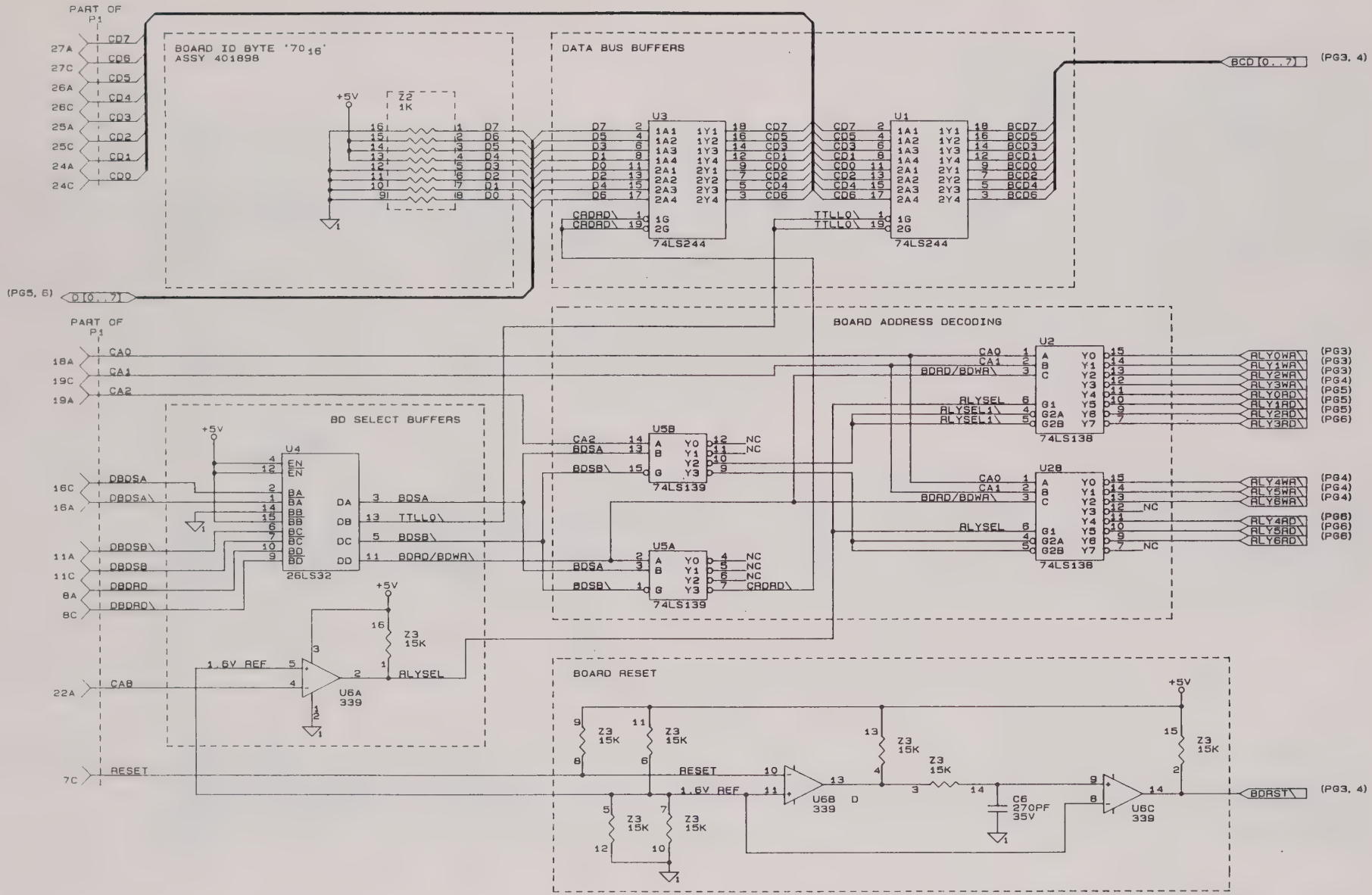
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

SCHEM., MATRIX 4 X12

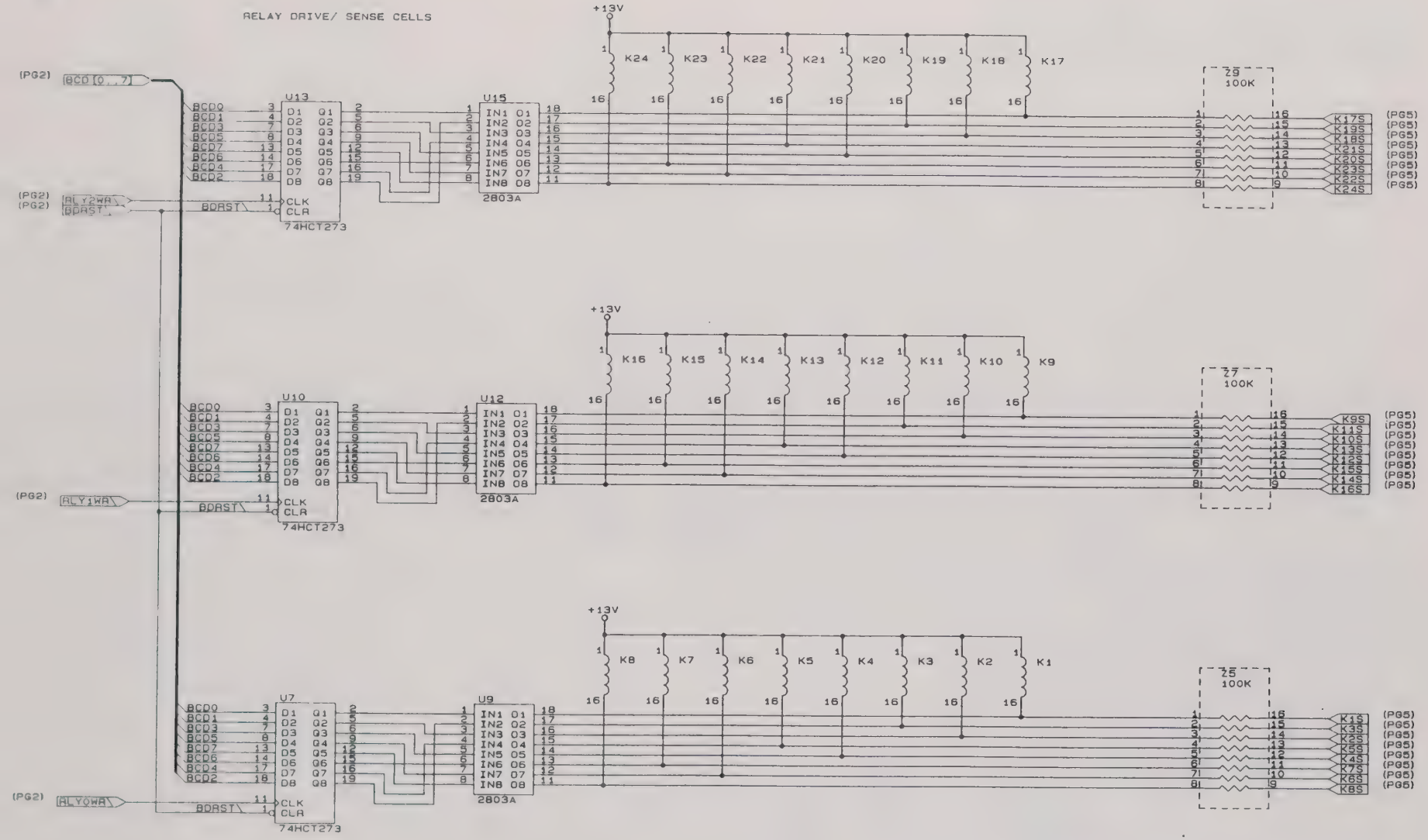
SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431898	A

SCALE NONE | SHEET 1 OF 8



SIZE	CODE IDENT NO.	DOCUMENT NO	REV
B	21793	431898	A
SCALE NONE		SHEET 2 OF 8	

RELAY DRIVE/ SENSE CELLS



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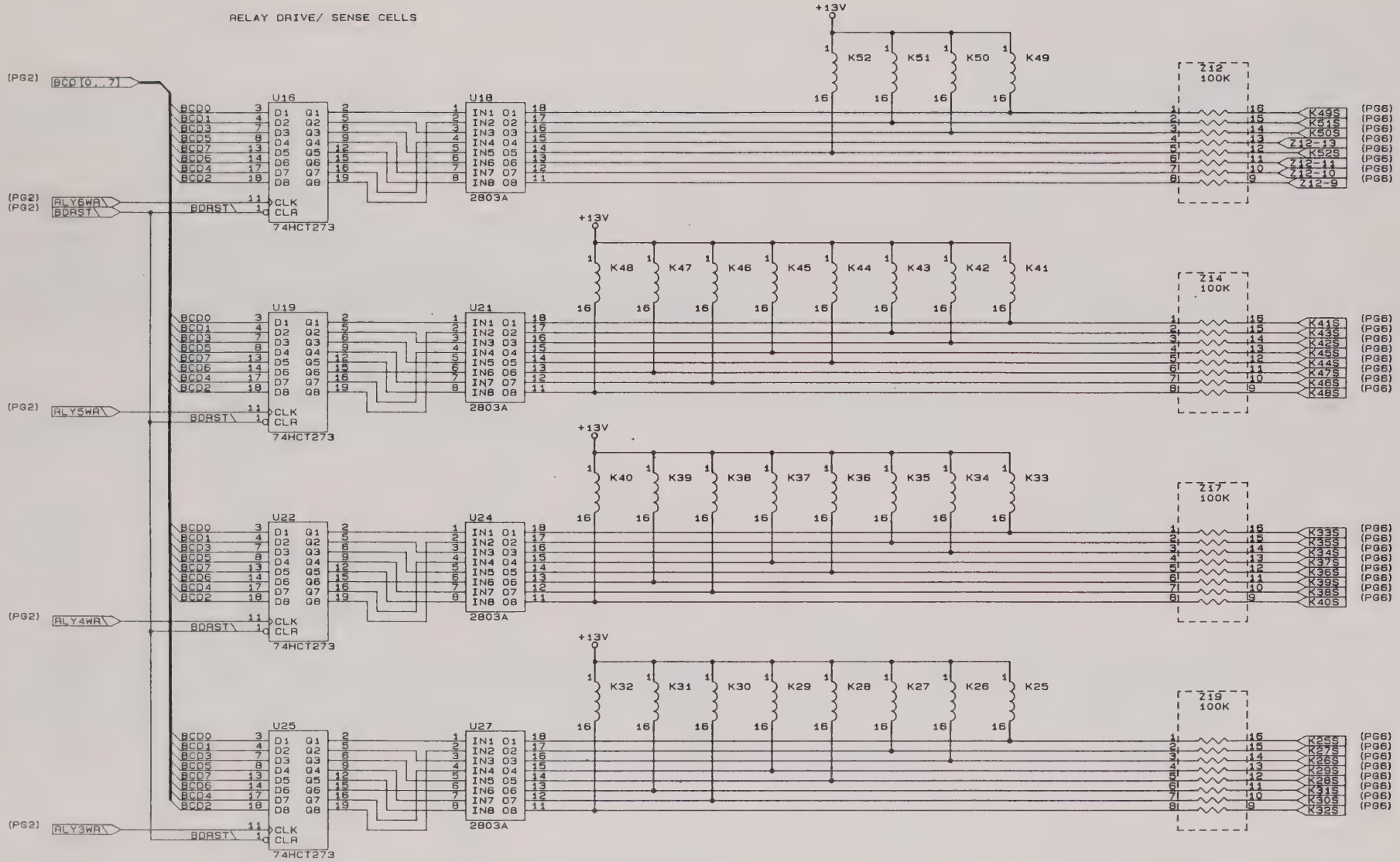

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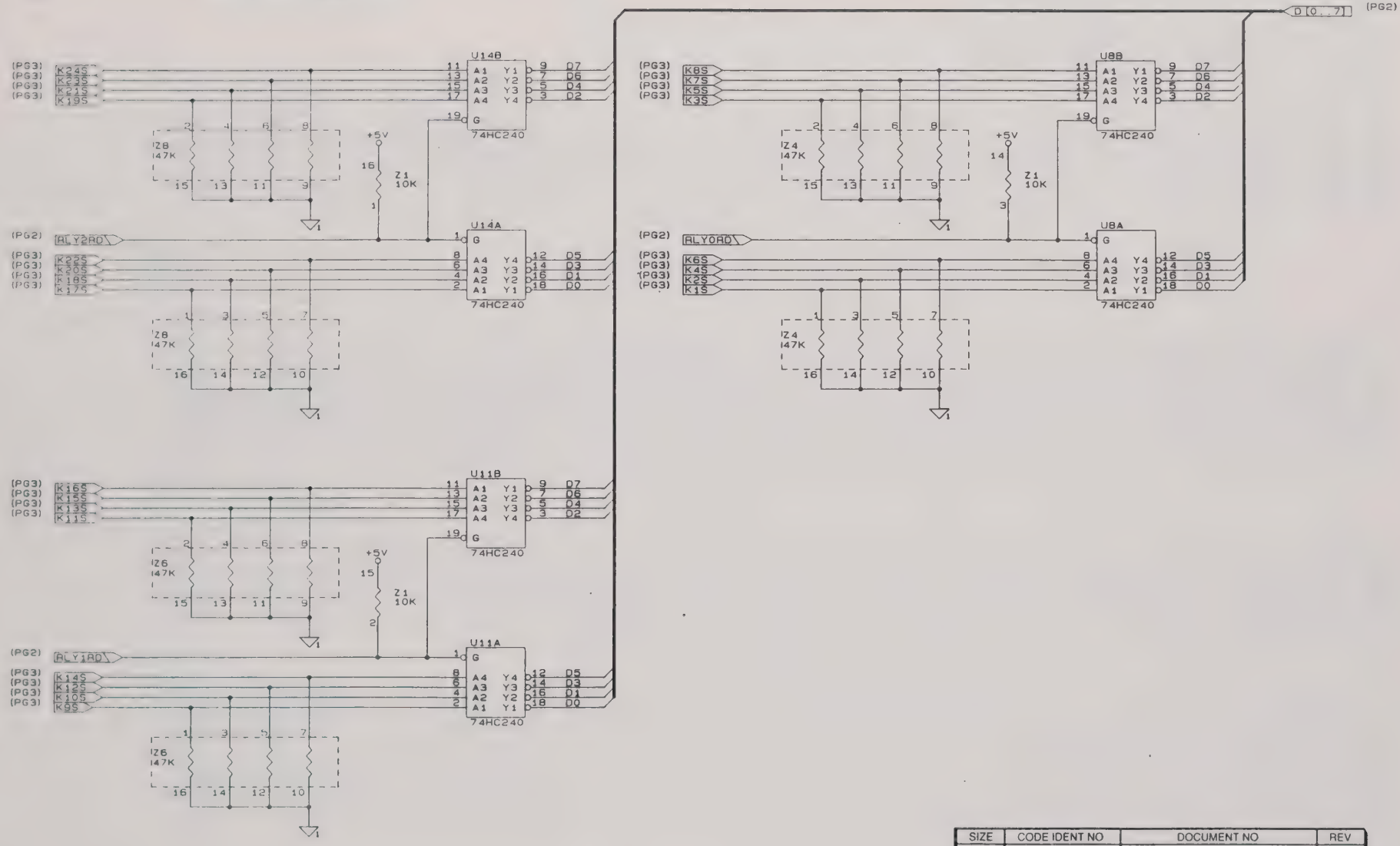
SCALE NONE		SHEET 4 OF 8	

RELAY DRIVE/ SENSE CELLS



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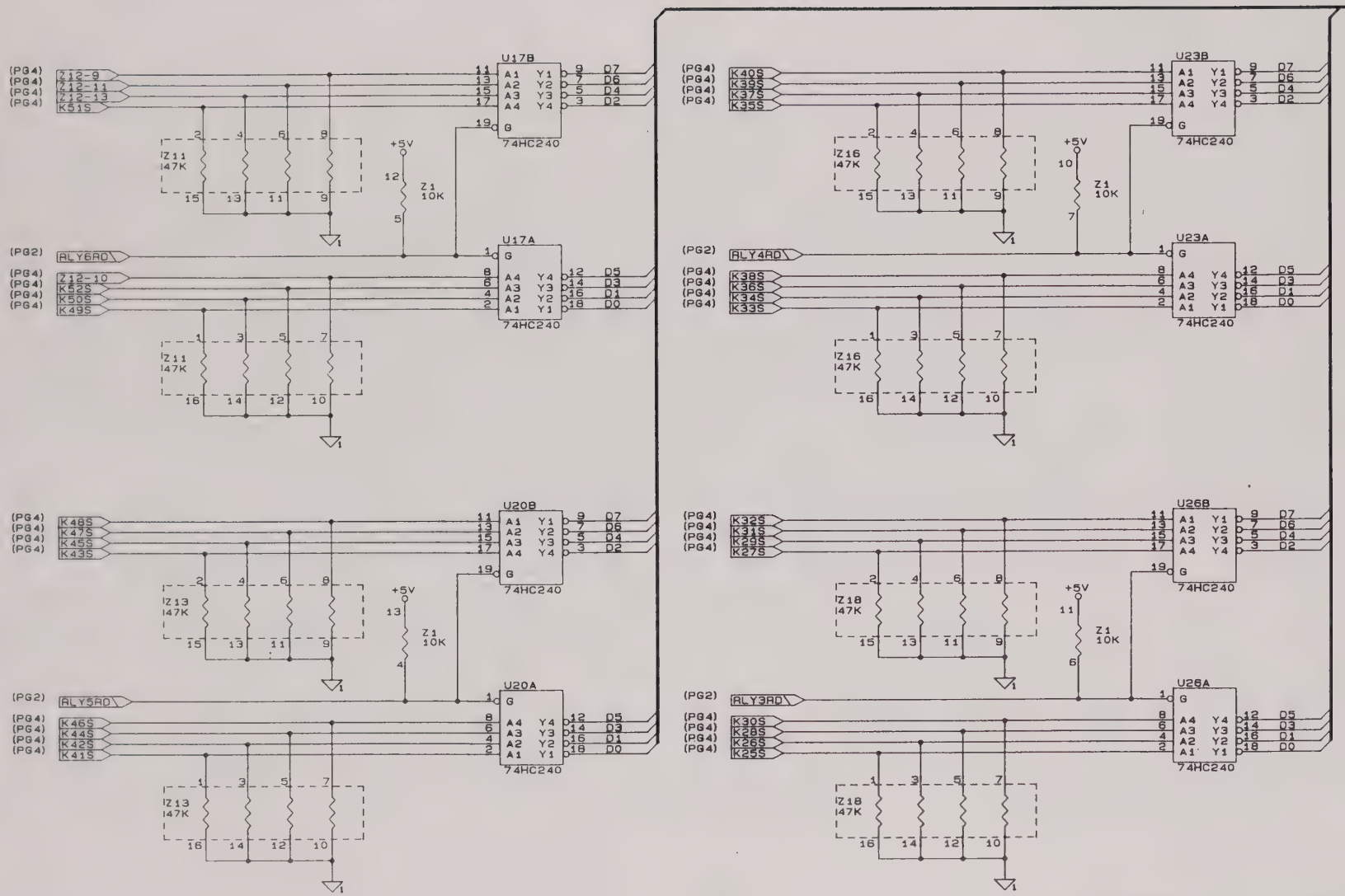
RELAY DRIVE/ SENSE CELLS



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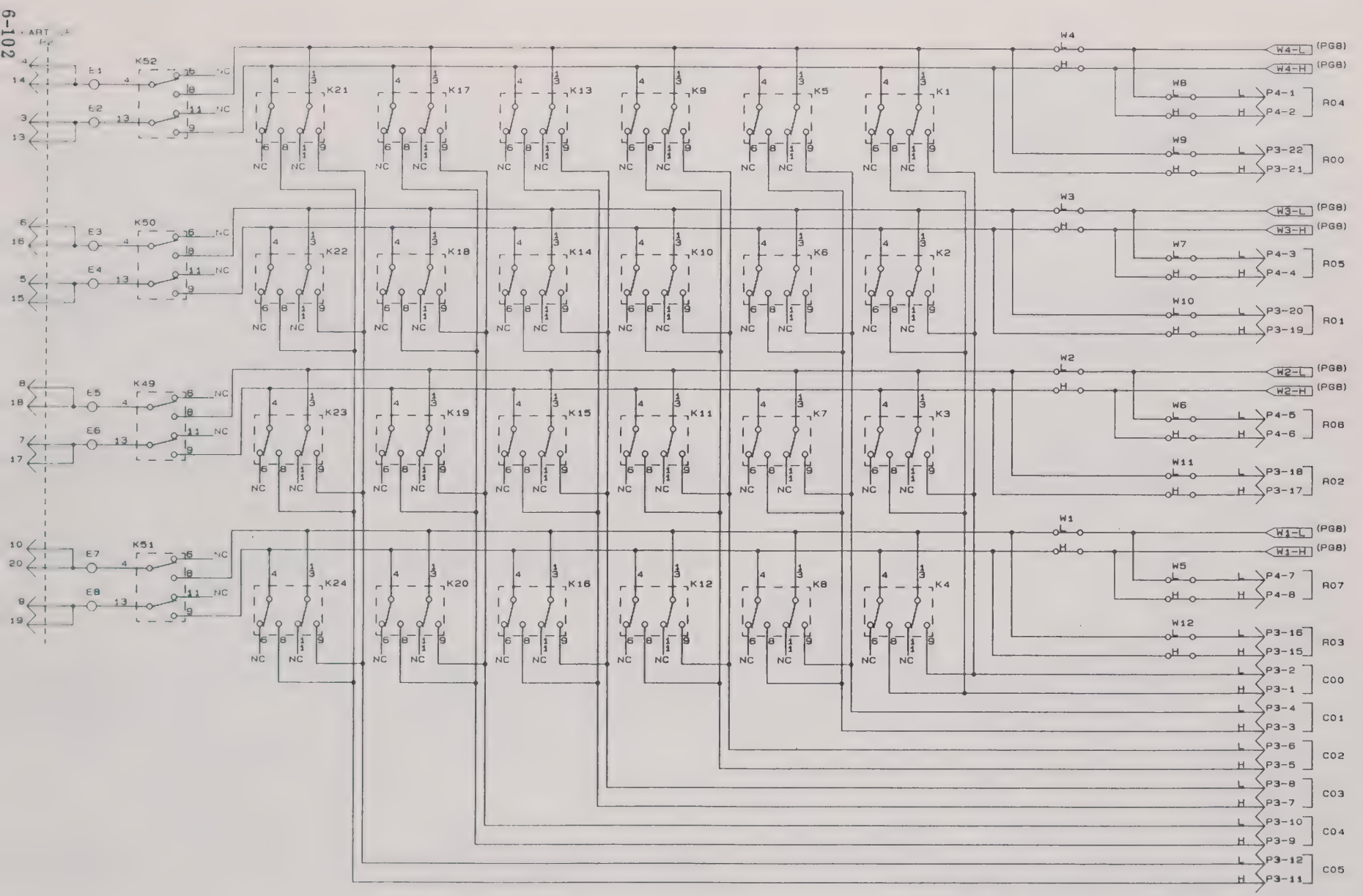

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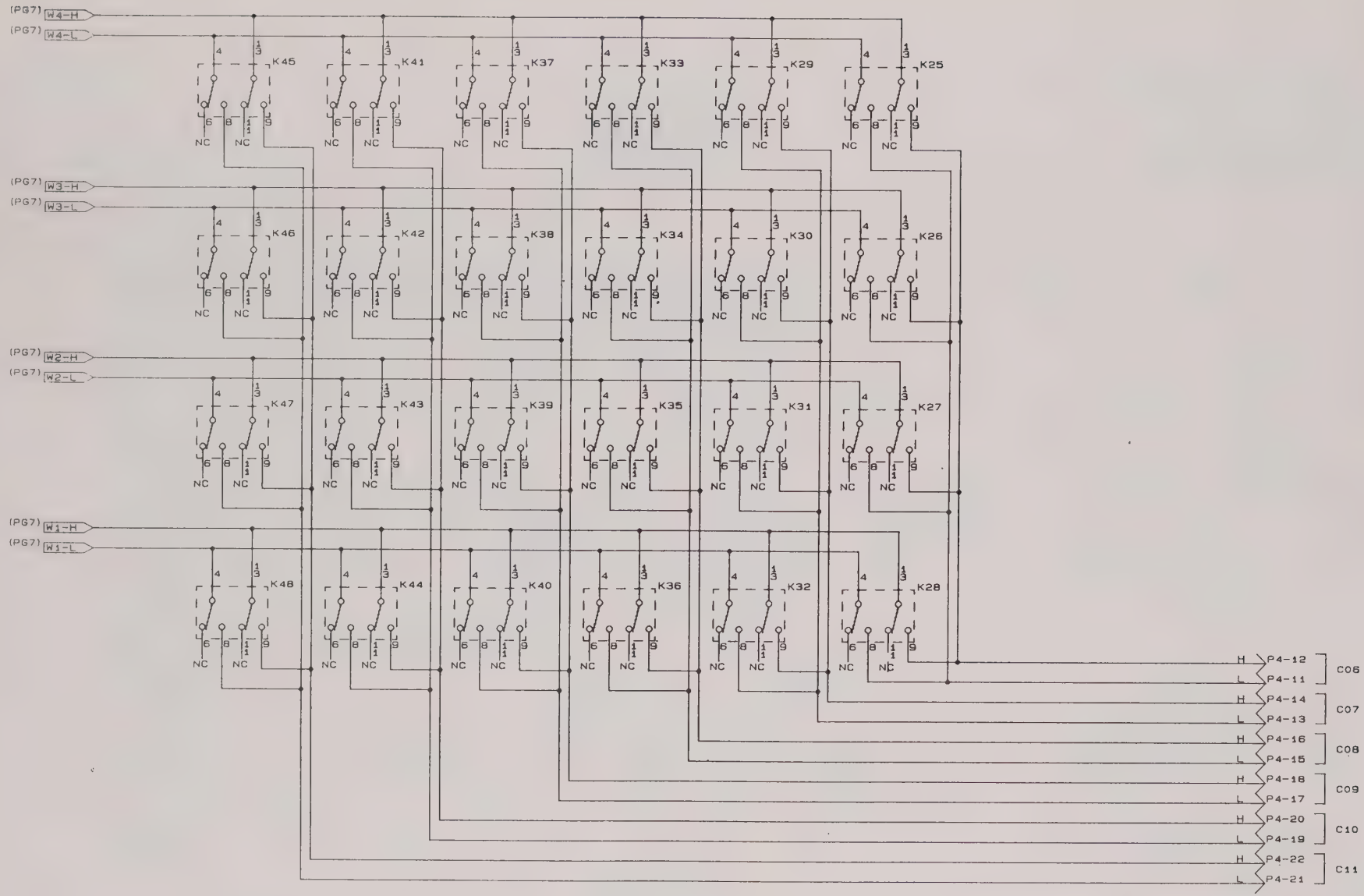

SIZE	CODE IDENT NO.	DOCUMENT NO	REV
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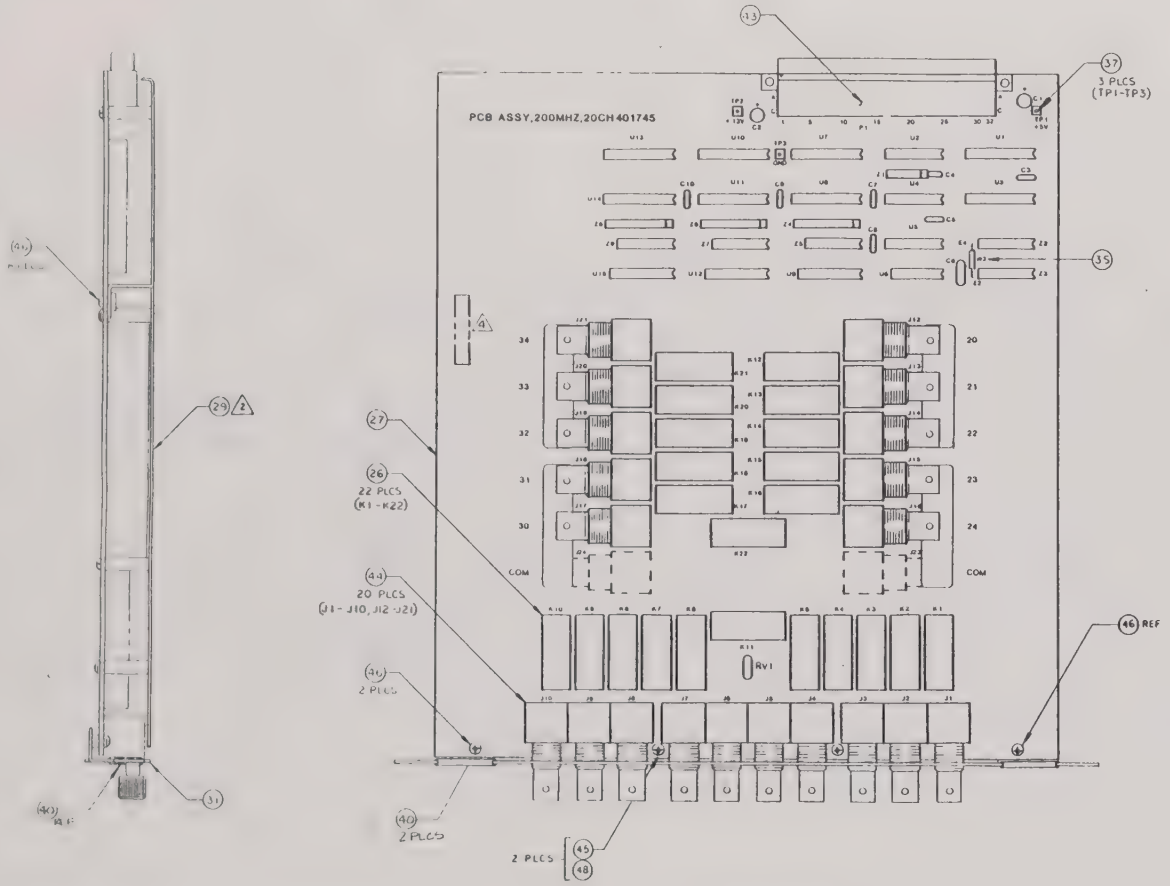
SCALE NONE		SHEET 8 OF 8	



4 INK STAMP SERIAL NUMBER APPROX. WHERE SHOWN, COMP. SIDE

3 HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31.

2 SHIELD NOT SHOWN IN TOP VIEW

1 REF SCHEM 431745

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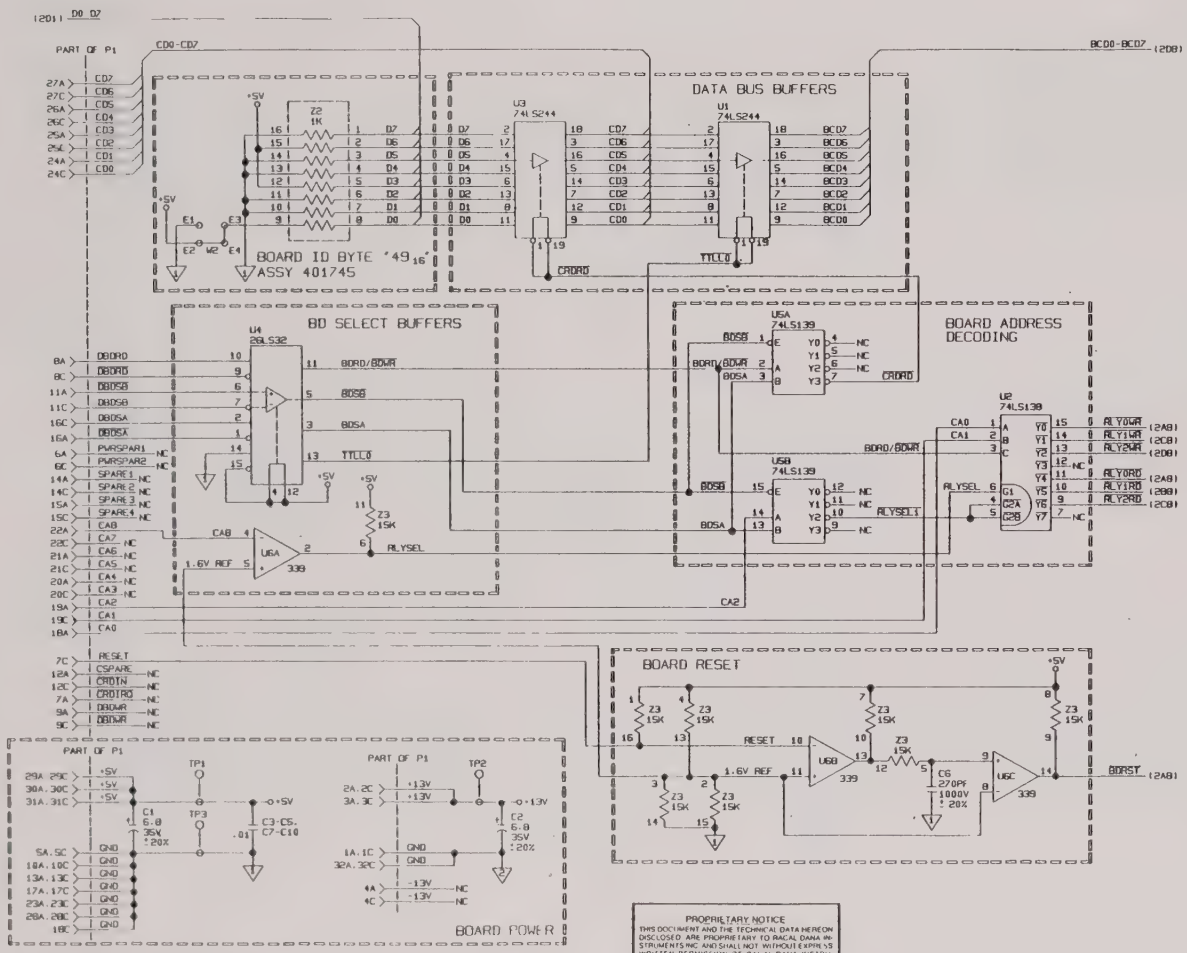
RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY,200MHZ,20CH			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401745	F
SCALE NONE		SHEET 1 OF 3	

USED ON 000


DATA BUS BUFFERS
BOARD ID BYTE '49 16'
ASSY 401745
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
PART OF P1
RELAY TOP VIEW
TYP 22 PLCS
K1-K22
UNUSED GATE TIED TO GROUND
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Z9	
W2	W1
U15	
TP3	
RV1	
P1	
K22	
J21	J11
E4	
C10	
HIGHEST	NOT USED
REF. DESIGNATIONS	

Z8	47K	9
Z6	47K	9
Z4	47K	9
Z1	10K	2,3
REF. DES.	TYPE	PINS
UNUSED LOGIC & NETWORKS		

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9,12,15	2803A		10		9
U8,11,14	74HC240	20		10	
U7,10,13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS139	16		8	
U1,3	74LS244	20		10	
IC POWER CONNECTIONS					

3. RELAYS K1 THRU K22 ARE RACAL DANA P/N 310169.
   ALL RELAYS SHOWN IN DE ENERGIZED POSITION
   ALL RELAY ELECTROSTATIC SHIELDS (PIN E) TIED TO SIGNAL GROUND.
2. RESISTOR NETWORKS ARE IN OHMS ±2%.
1. CAPACITOR VALUES ARE IN MICROFARADS. ±10% 100V UNLESS OTHERWISE SPECIFIED

RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: SCHEM.,200MHZ 4:1

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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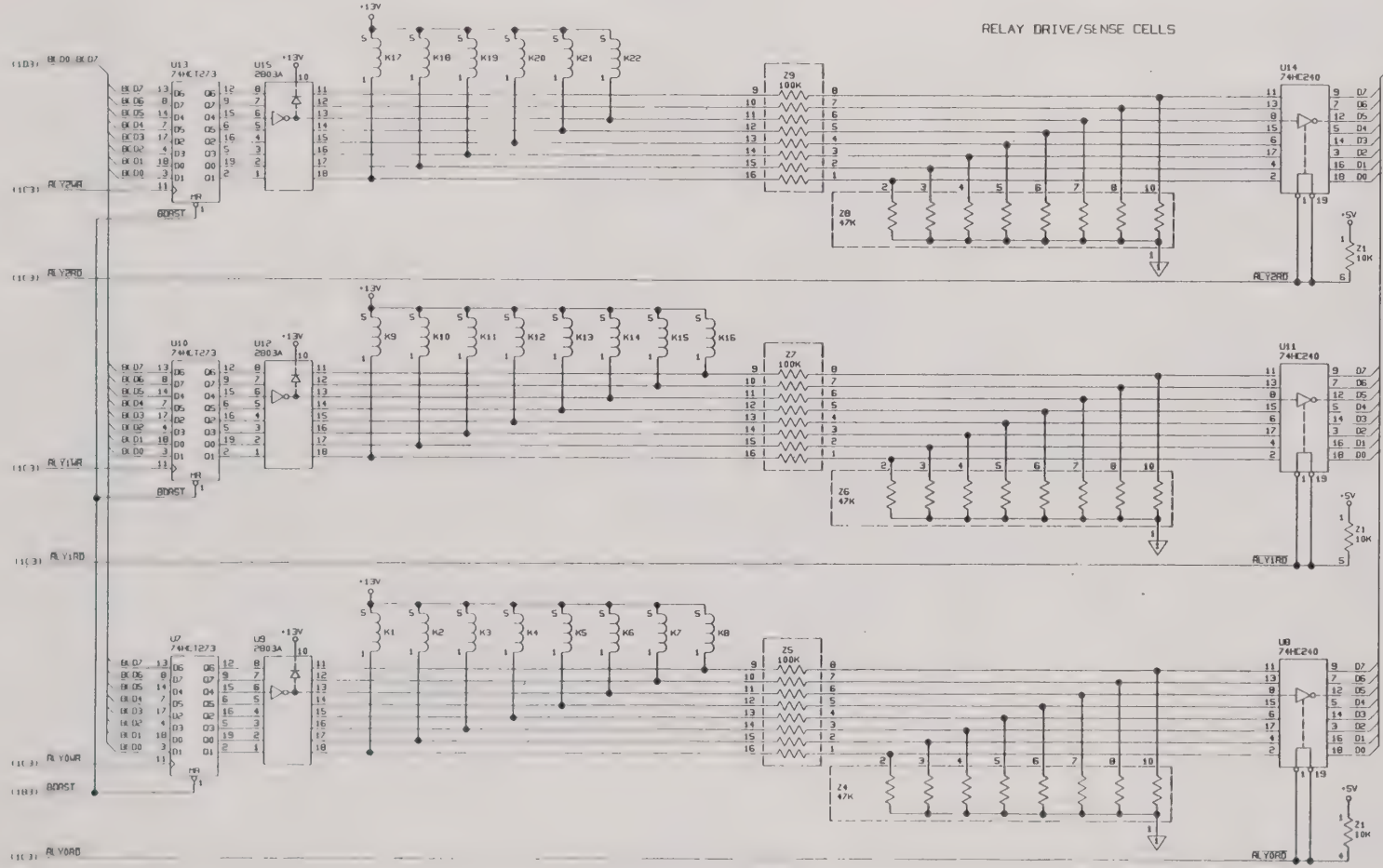
SCALE NONE SHEET 1 OF 3

DOC NO 431745

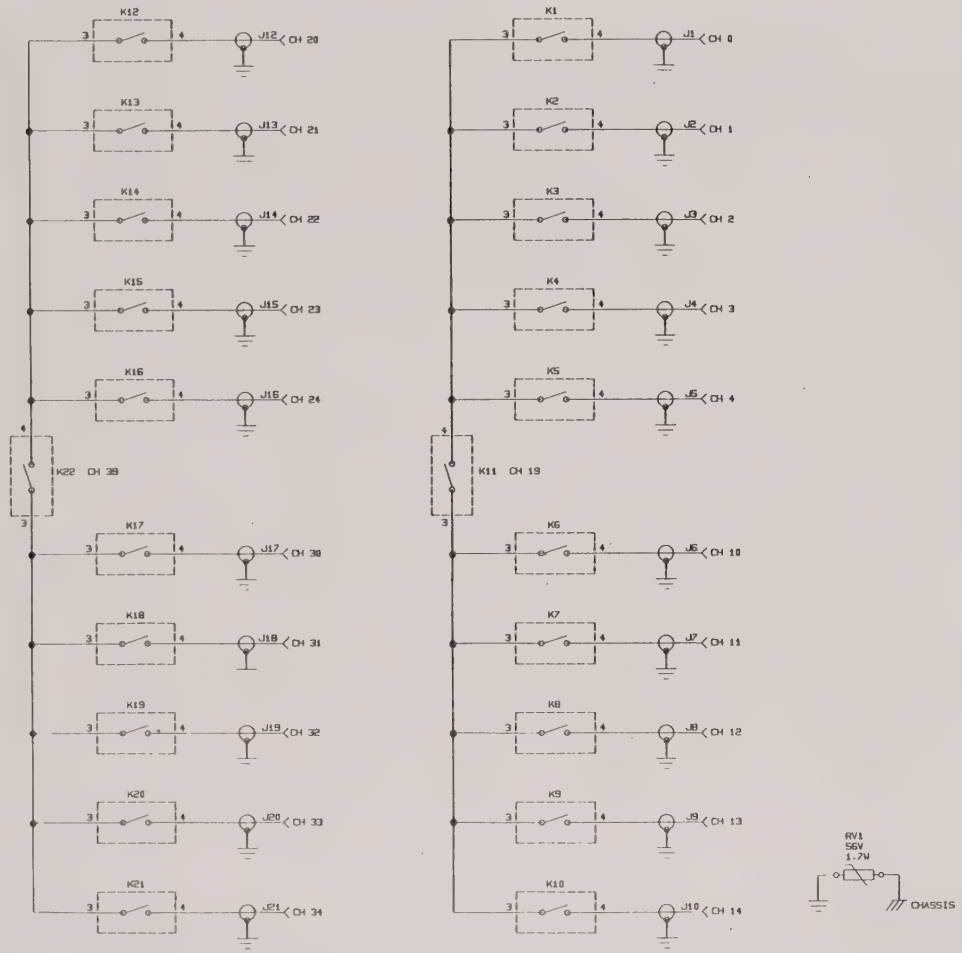
6-105



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431745	A
SCALE NONE		SHEET 2 OF 3	

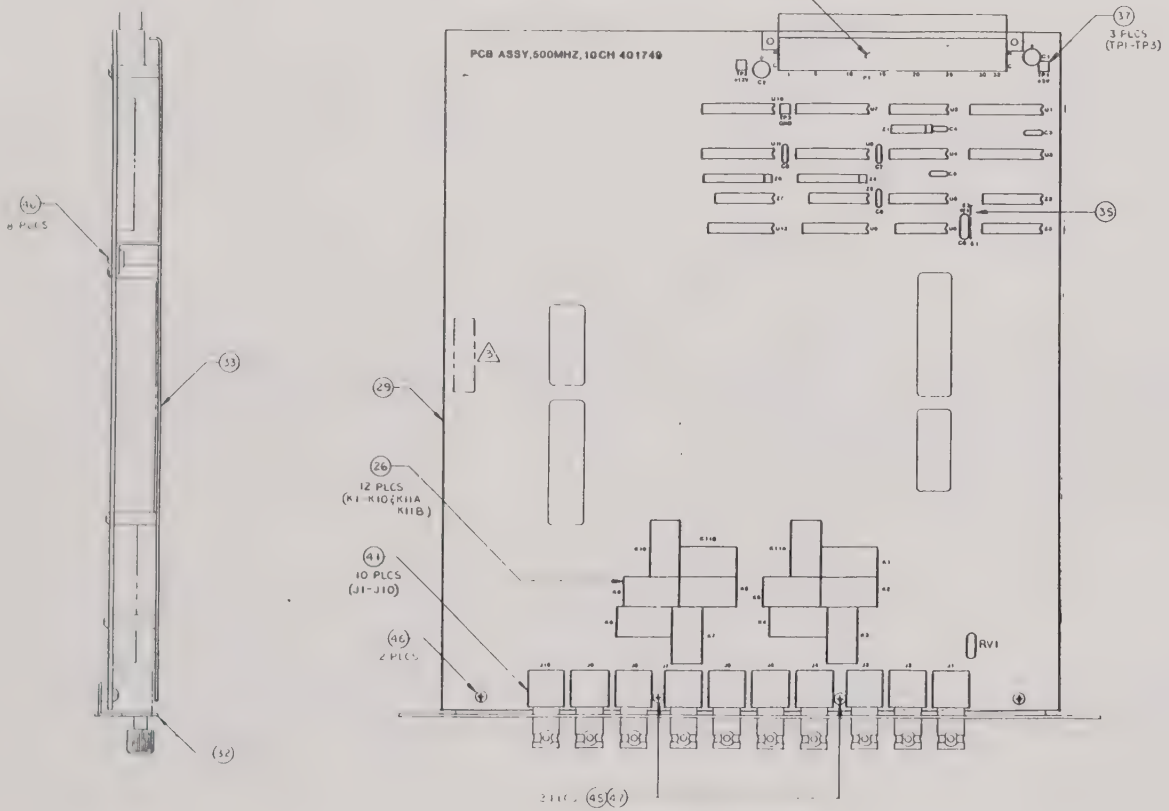
DOC NO 431745

SIGNAL SWITCHING



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431745	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 431745



3 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

2 HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 32.

1. REF SCH 431749

NOTES UNLESS OTHERWISE SPECIFIED

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE
PCB ASSY,500MHZ,10CH

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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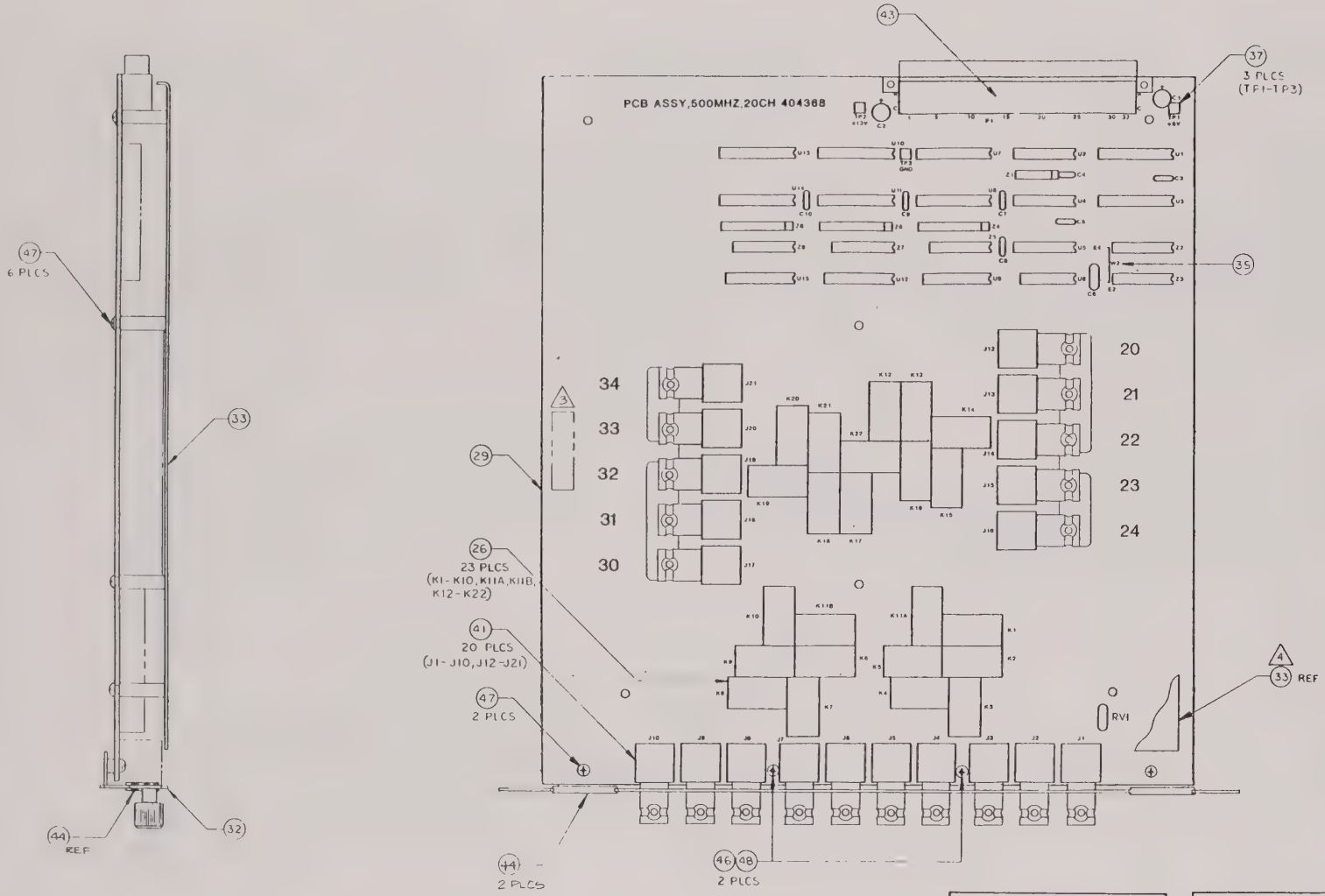
SCALE none | SHEET 1 OF 3

DO NOT SCALE 401749



4 SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY.

3 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

2 HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31

1. REF SCH 431/49

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE			
PCB ASSY,500MHZ 20CH			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
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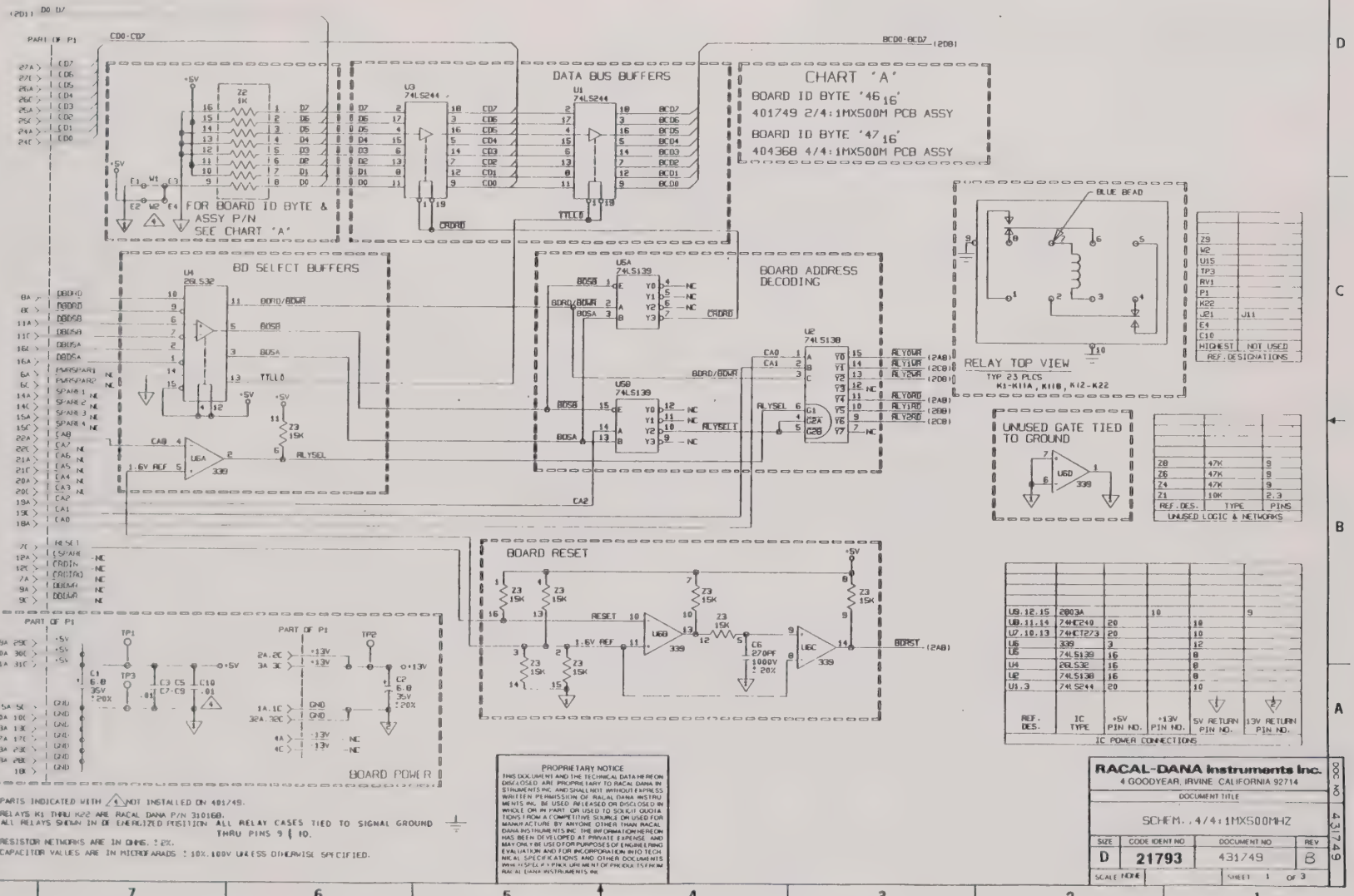
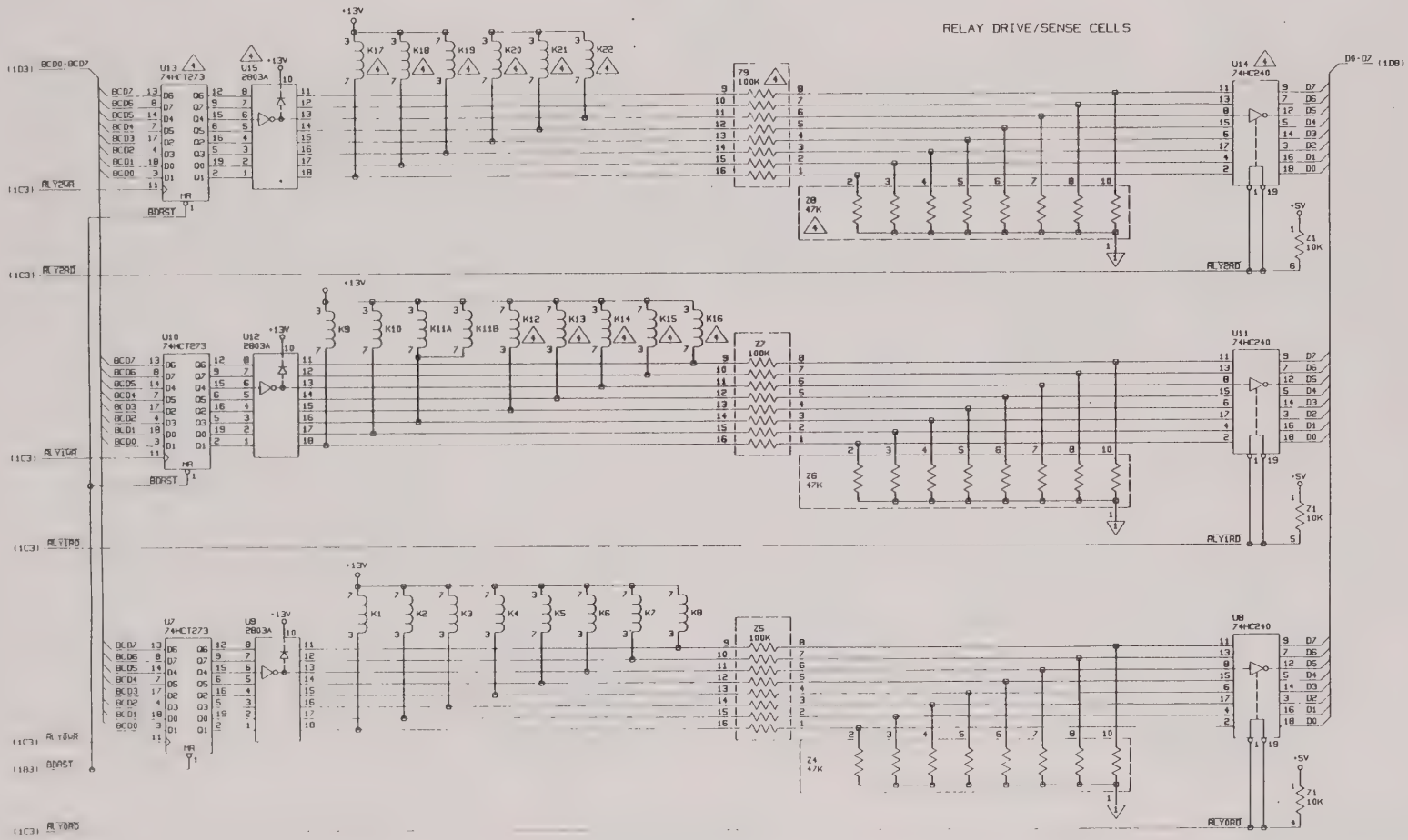
SCALE NONE		SHEET 1 OF 1	


DATA BUS BUFFERS
CHART 'A'
BOARD ID BYTE '46 16'
401749 2/4:1MX500M PCB ASSY
BOARD ID BYTE '47 16'
404368 4/4:1MX500M PCB ASSY
FOR BOARD ID BYTE & ASSY P/N SEE CHART 'A'
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
RELAY TOP VIEW
TYP 23 PLCS
K1-K11A, K11B, K12-K22
BLUE BEAD
UNUSED GATE TIED TO GROUND
UNUSED LOGIC & NETWORKS
IC POWER CONNECTIONS
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714
SCHEM., 4/4:1MX500MHZ
21793
431749
BOARD POWER



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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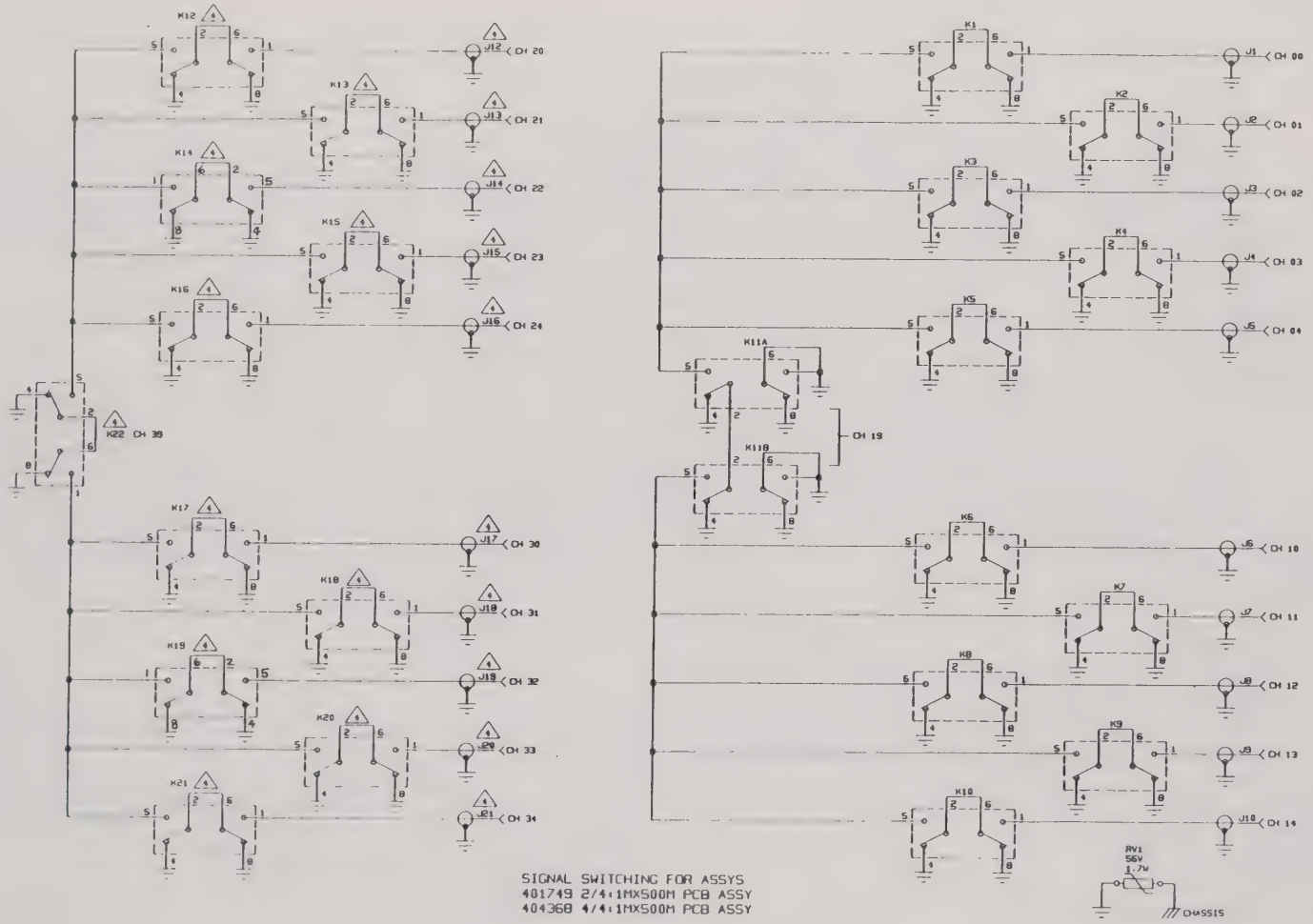
SCALE NONE		SHEET 2 OF 3	

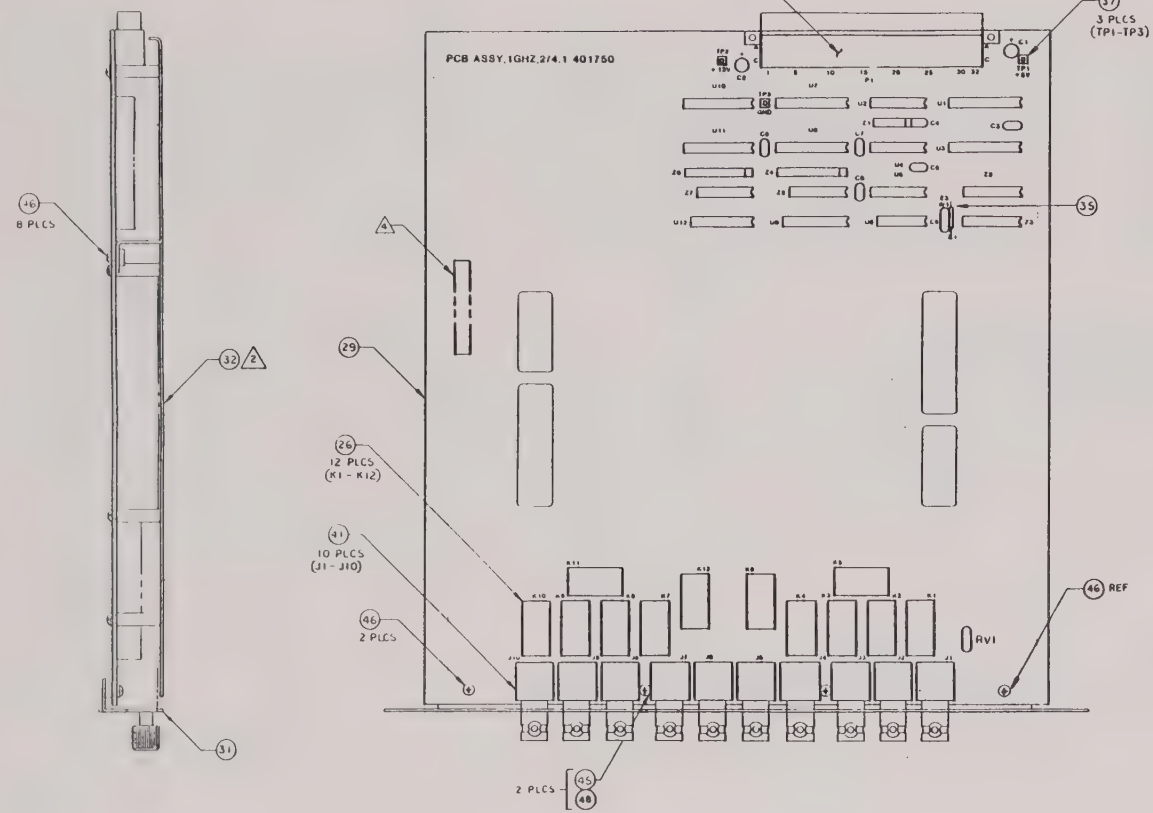
DOC NO 431749



SIGNAL SWITCHING FOR ASSYS
401749 2/4:1MX500M PCB ASSY
404368 4/4:1MX500M PCB ASSY

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431749	B
SCALE NONE		SHEET 3 OF 3	

DOC NO 431749



4. INK STAMP SERIAL NUMBER APPROX. WHERE SHOWN, COMP. SIDE.
3. HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31
2. SHIELD NOT SHOWN IN TOP VIEW.
1. REF SCH 431750

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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE: PCB ASSY, IGHZ, 2/4:1

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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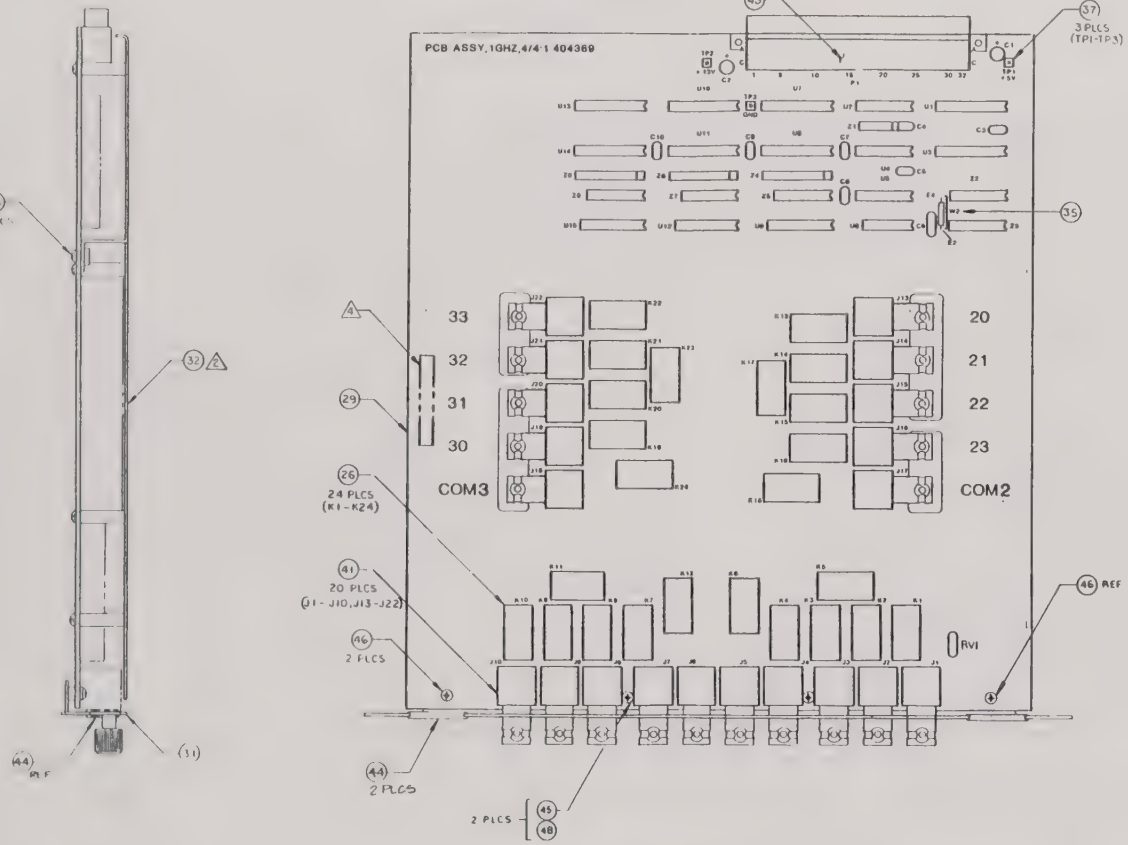
SCALE NONE | SHEET 1 OF 3

401750 E 800



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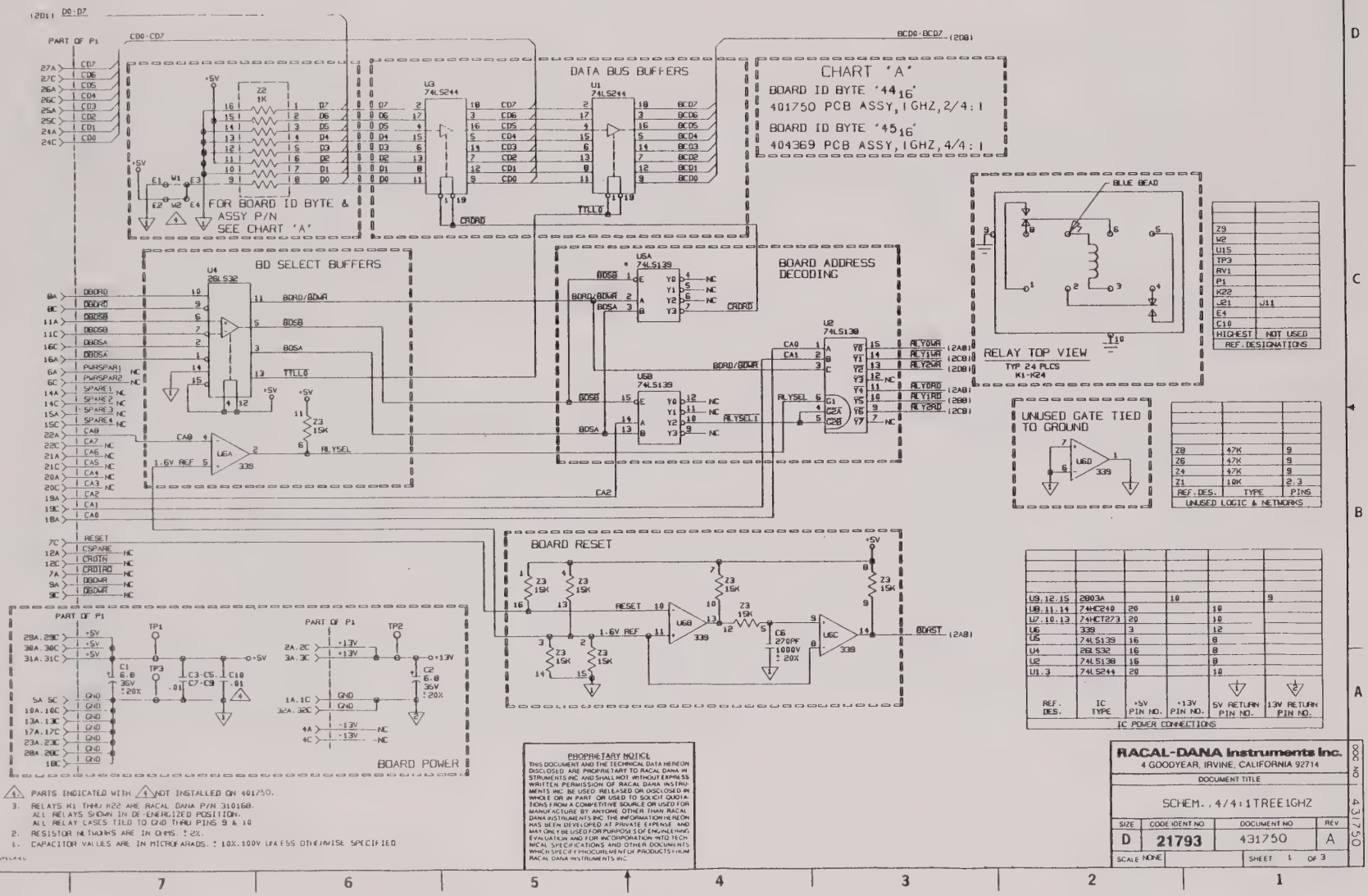
△1 INK STAMP SERIAL NUMBER APPROX. WHERE SHOWN, COMP. SIDE
3 HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31.
△2 SHIELD NOT SHOWN IN TOP VIEW.
4. REF. SCH. 431750

RACAL-DANA Instruments Inc. 4 GOODYEAR IRVINE CALIFORNIA 92714			
DOCUMENT TITLE: PCB ASSY, 1GHZ, 4/4:1			
SIZE: D	CODE IDENT NO: 21793	DOCUMENT NO: 404369	REV: F
SCALE: None		SHEET 1 OF 3	
DOC NO 404369			


DATA BUS BUFFERS
CHART 'A'
BOARD ID BYTE '44 16'
401750 PCB ASSY, 1GHZ, 2/4:1
BOARD ID BYTE '45 16'
404369 PCB ASSY, 1GHZ, 4/4:1
FOR BOARD ID BYTE & ASSY P/N SEE CHART 'A'
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BLUE BEAD
RELAY TOP VIEW
TYP 24 PLCS K1-K24
UNUSED GATE TIED TO GROUND
BOARD RESET
BOARD POWER
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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714
SCHEM., 4/4:1 TREE 1GHZ
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431750
REV A
SCALE NONE
SHEET 1 OF 3
DOC NO 431750

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9,12,15	2003A		10		9
U8,11,14	74HC240	20		10	
U7,10,13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	

IC POWER CONNECTIONS

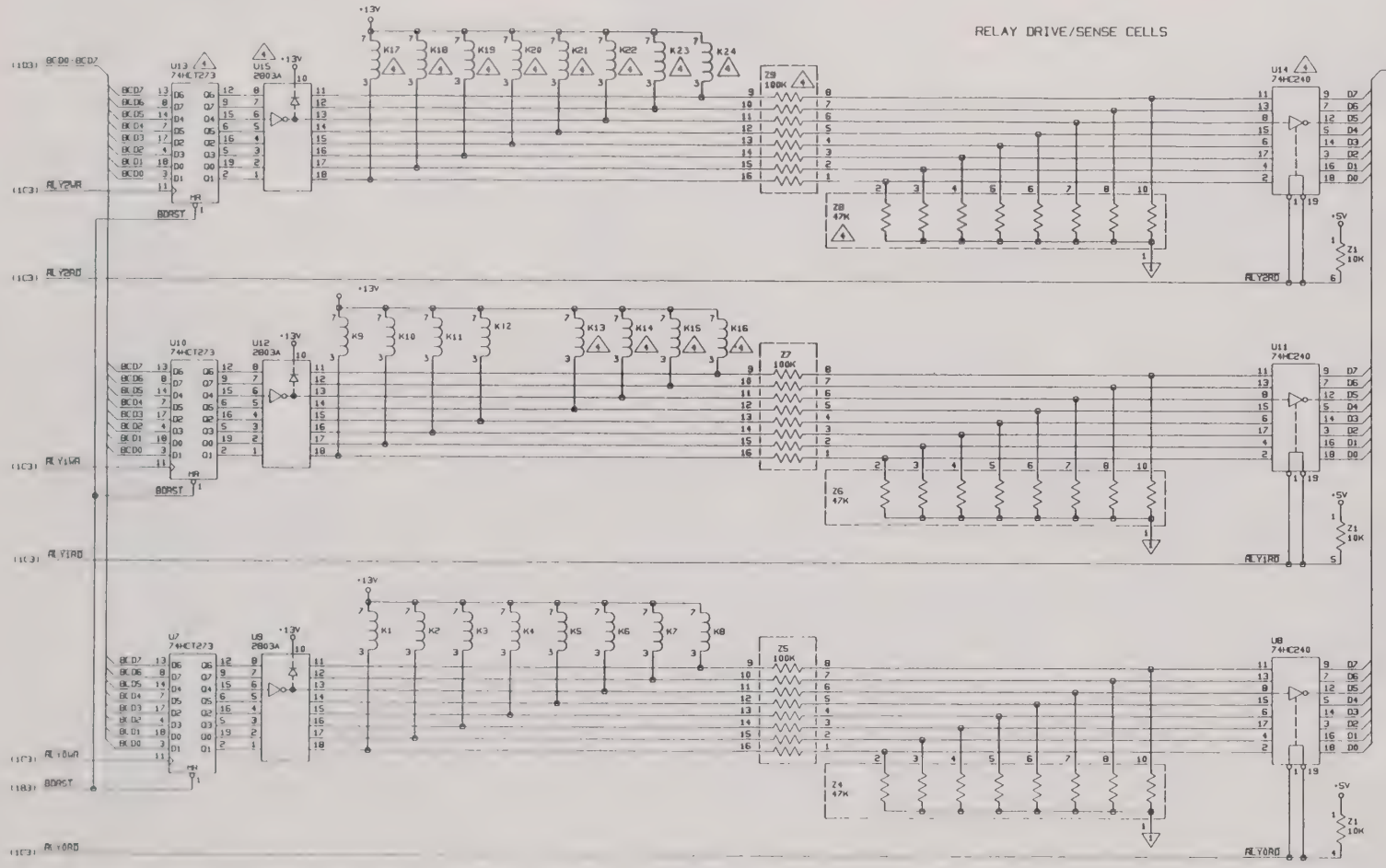
REF. DES.	TYPE	PIN
Z8	47K	9
Z6	47K	9
Z4	47K	9
Z1	10K	2,3

UNUSED LOGIC & NETWORKS

Z9	
W2	
U15	
TP3	
RV1	
P1	
K22	
J21	J11
E4	
C10	
HIGHEST	NOT USED

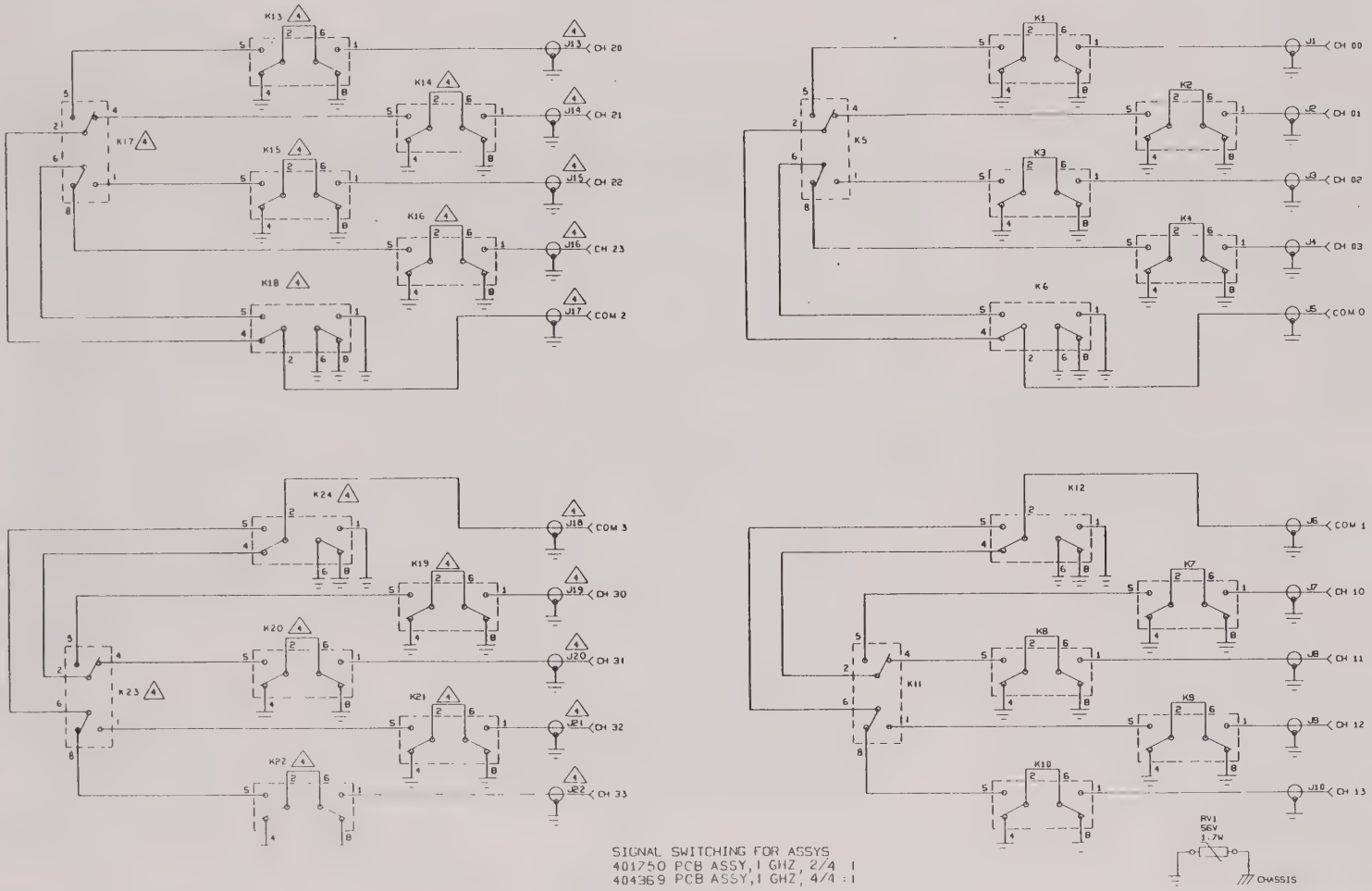
REF. DESIGNATIONS

1. CAPACITOR VALUES ARE IN MICROFARADS. ± 10%, 100V UNLESS OTHERWISE SPECIFIED.
2. RESISTOR NETWORKS ARE IN OHMS. ± 2%.
3. RELAYS K1 THRU K22 ARE RACAL DANA P/N 310168. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION. ALL RELAY CASES TIED TO GND THRU PINS 9 & 10
4. PARTS INDICATED WITH ⚠4 NOT INSTALLED ON 401750.



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
D	21793	431750	A
SCALE NONE		SHEET 2 OF 3	

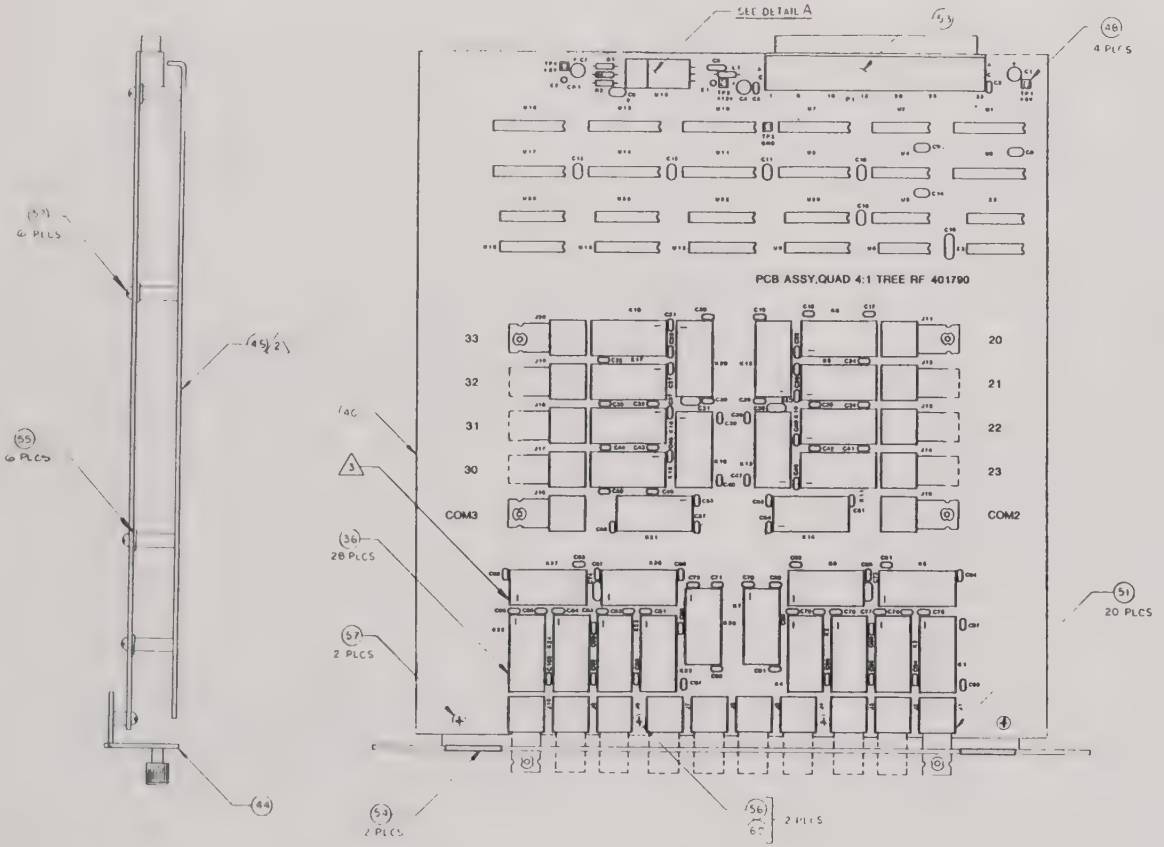
DOC NO 431750



SIGNAL SWITCHING FOR ASSYS
401750 PCB ASSY, 1 GHZ, 2/4 : 1
404369 PCB ASSY, 1 GHZ, 4/4 : 1

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431750	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 431750



⚠3 IMPORTANT: NOTE ORIENTATION OF RELAYS ON DRAWINGS.

⚠2 SHIELD NOT SHOWN IN TOP VIEW
LREF VIEW 43-790

NOTES UNLESS OTHERWISE SPECIFIED

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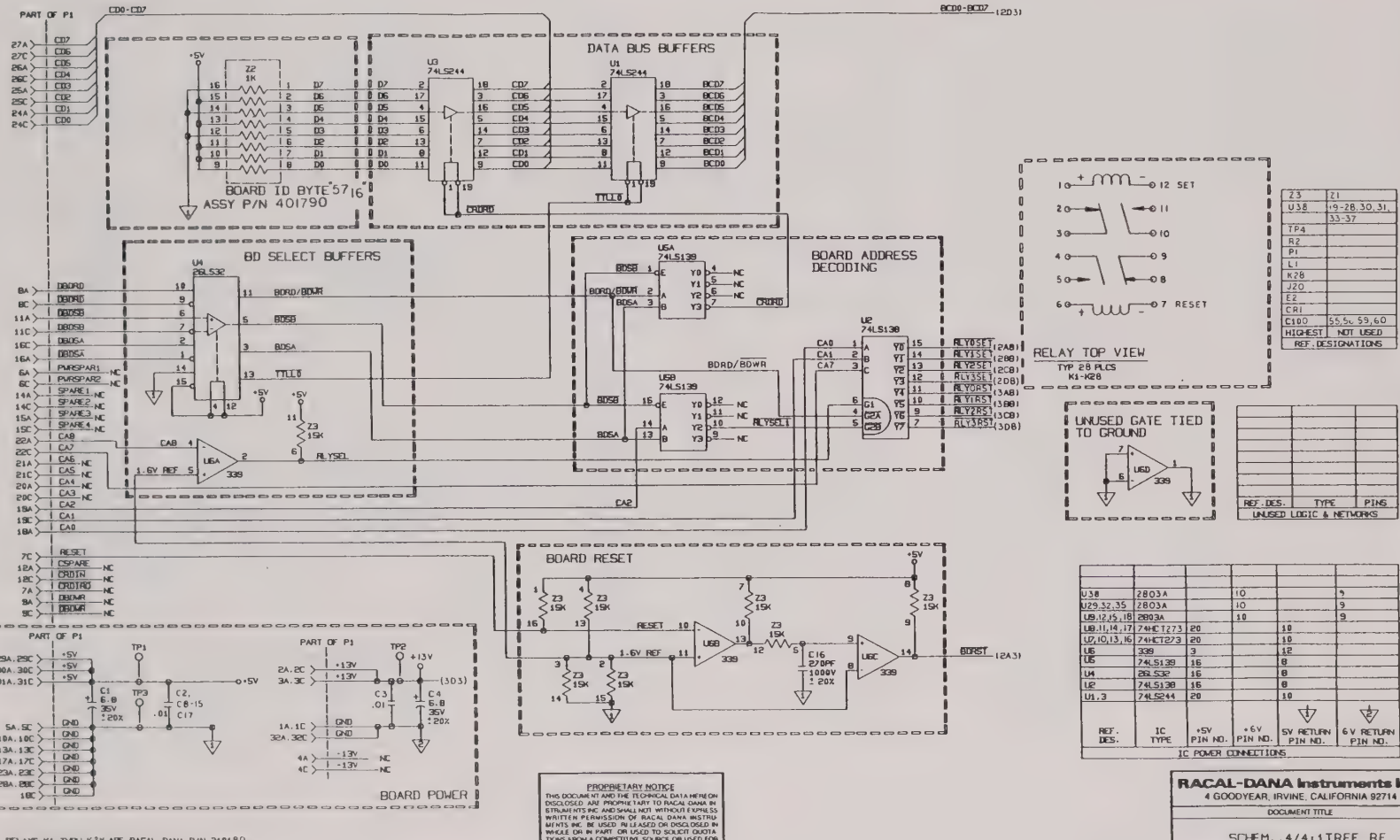
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE, CALIFORNIA 92714

DOCUMENT TITLE
PCB ASSY,QUAD 4:1 TREE RF

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401790	A

SCALE 4/1 | SHEET 1 OF 4

DOC NO 401790


DATA BUS BUFFERS
BOARD ID BYTE 57/16
ASSY P/N 401790
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
RELAY TOP VIEW
TYP 28 PLCS
K1-K28
UNUSED GATE TIED TO GROUND
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RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714
DOCUMENT TITLE
SCHEM.,4/4:1TREE RF
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431790
REV A
SCALE NONE
SHEET 1 OF 4
DOC. NO. 431790

Z3	Z1
U38	19-28,30,31, 33-37
TP4	
R2	
P1	
L1	
K28	
J20	
E2	
CR1	
C100	55,56,59,60
HIGHEST	NOT USED

REF. DESIGNATIONS

REF. DES.	TYPE	PINS

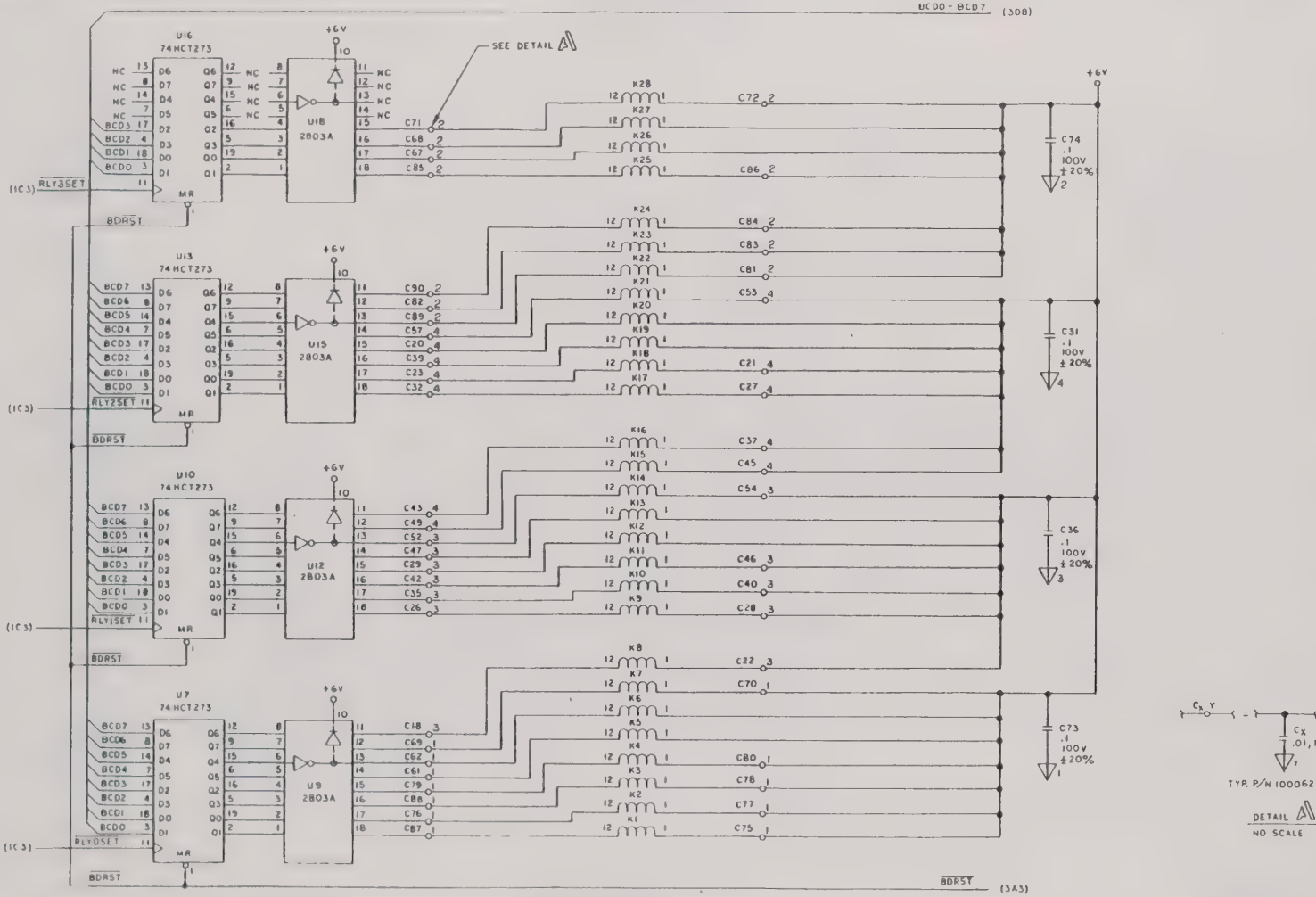
UNUSED LOGIC & NETWORKS

REF. DES.	IC TYPE	+5V PIN NO.	+6V PIN NO.	5V RETURN PIN NO.	6V RETURN PIN NO.
U38	2803A		10		9
U29,32,35	2803A		10		9
U9,12,15,18	2803A		10		9
U8,11,14,17	74HCT273	20		10	
U7,10,13,16	74HCT273	20		10	
U6	339	3		12	
U5	74LS138	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1,3	74LS244	20		10	

IC POWER CONNECTIONS

3. RELAYS K1 THRU K28 ARE RACAL DANA P/N 310180. ALL RELAYS SHOWN IN RESET POSITION. ALL RELAY CASE SHIELDS TIED TO SIGNAL GROUND.
2. RESISTOR NETWORKS ARE IN OHMS, ±2%.
1. CAPACITOR VALUES ARE IN MICROFARADS, ±10%,100V UNLESS OTHERWISE SPECIFIED.

6-1119



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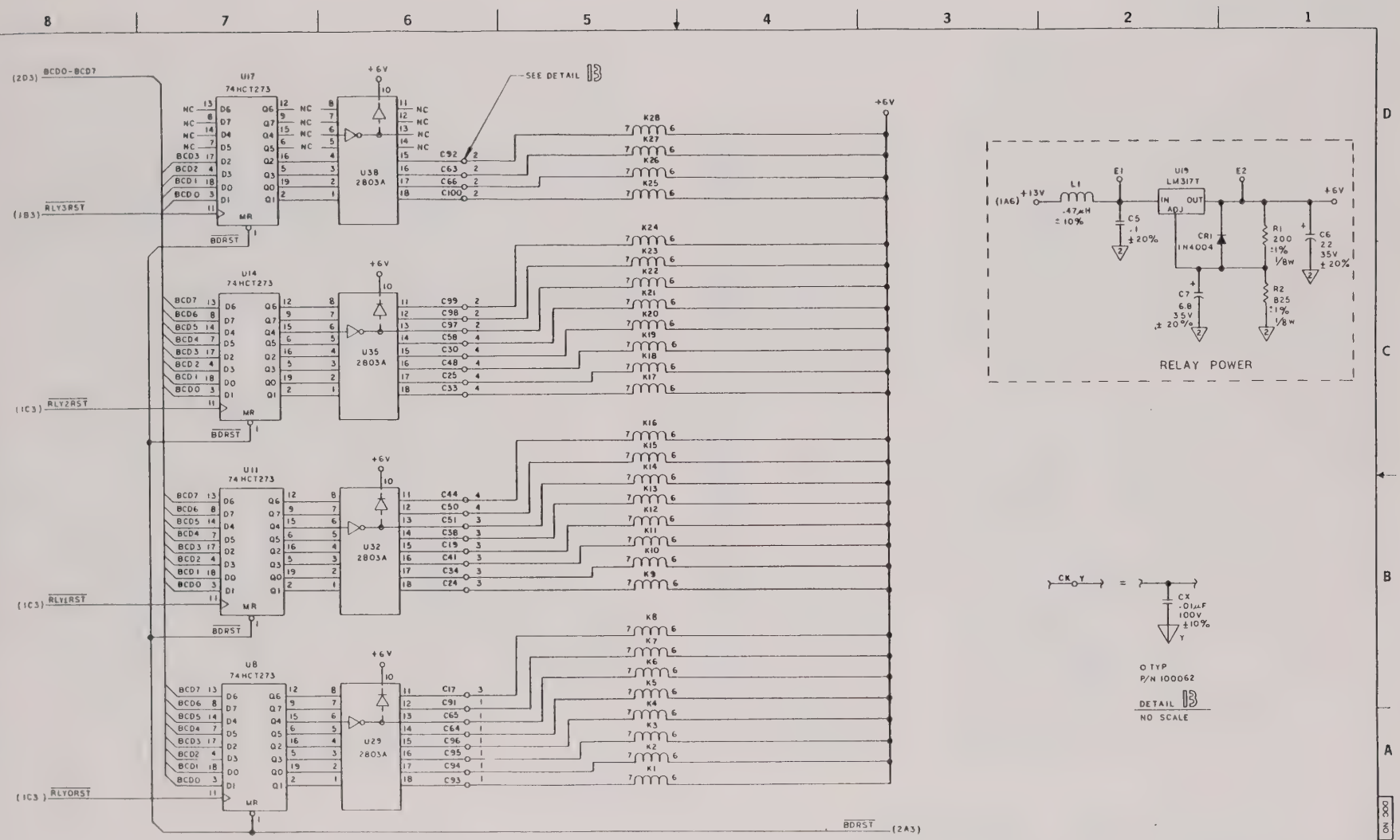
D	21793	431790	A
SCALE --		SHEET 2 OF 4	

DOC NO 431790



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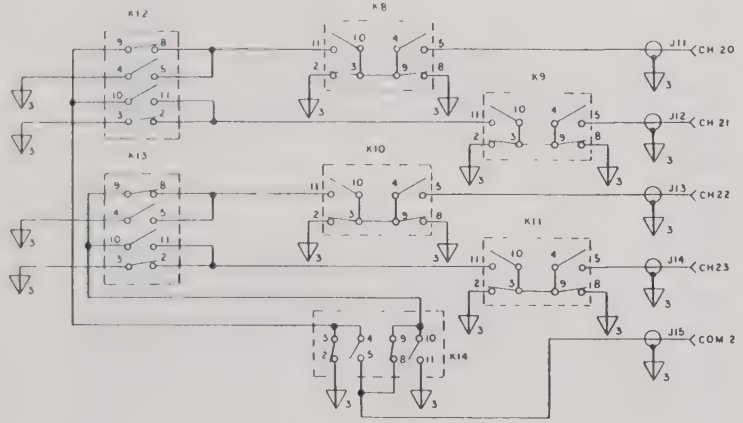
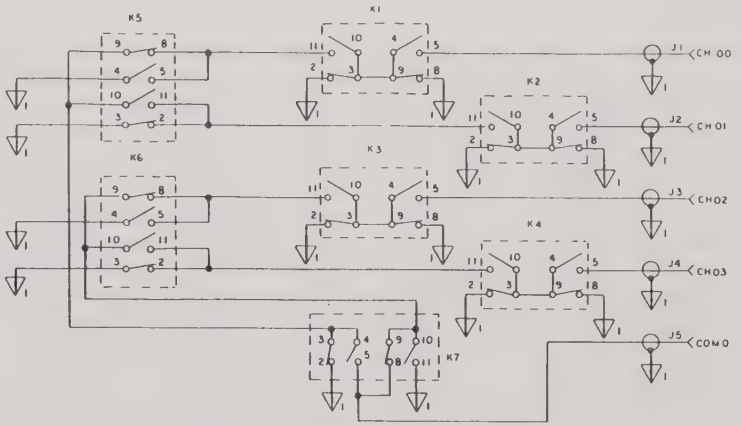
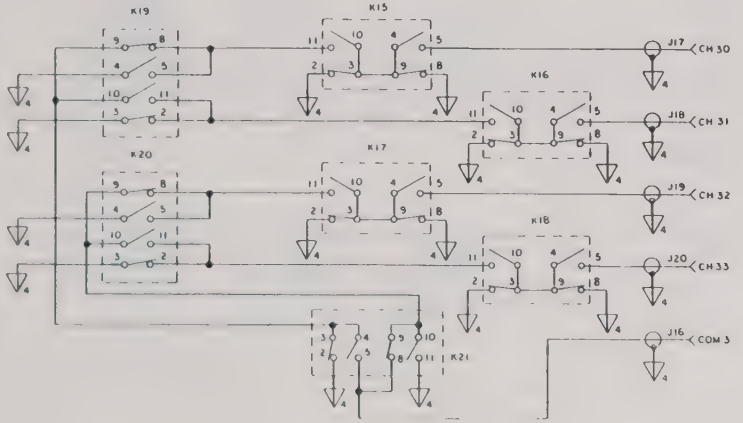
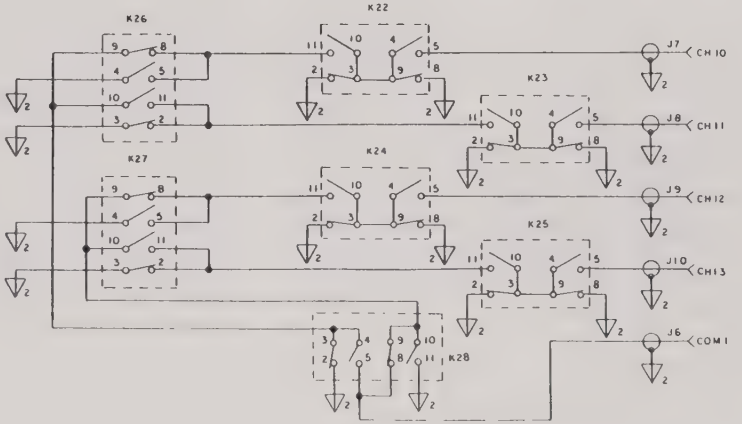
SCALE —		SHEET 3 OF 4	

DOC NO 431790









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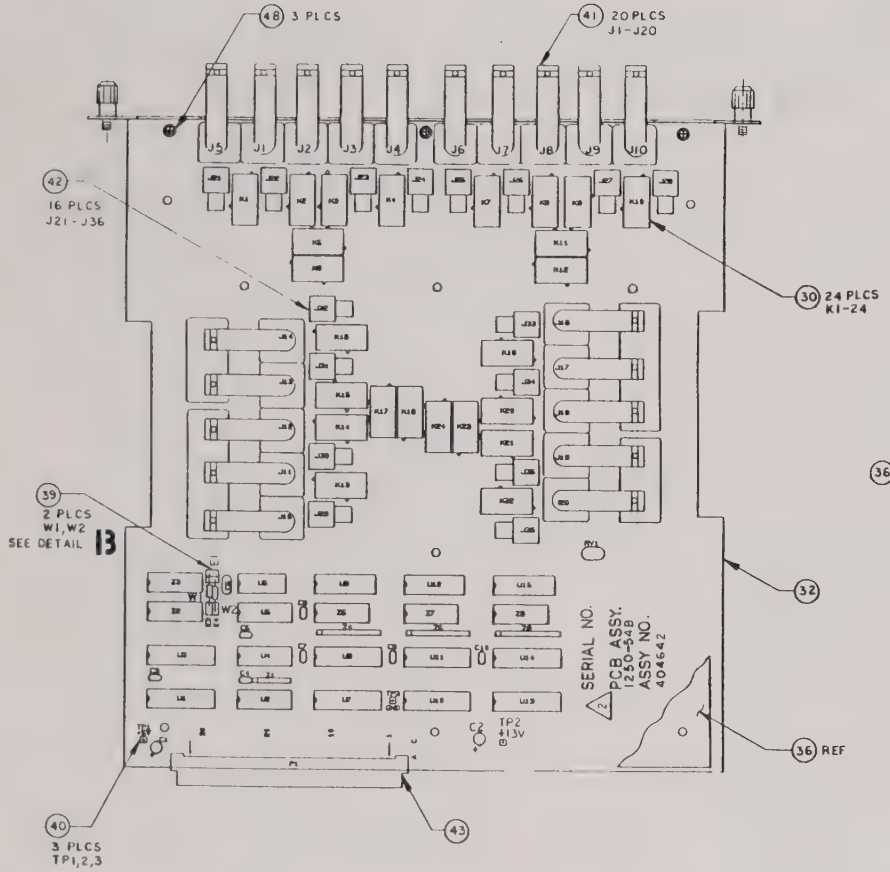
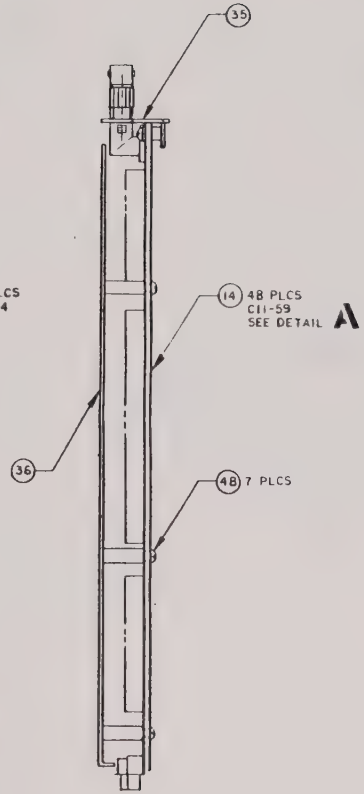
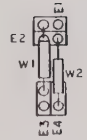
D	21793	431790	A
SCALE —		SHEET 4 OF 4	

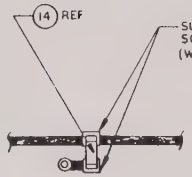
DOC NO 431790







DETAIL B
SCALE: NONE



DETAIL A
SCALE: NONE
TYPICAL SURFACE MOUNTING, 48 PLACES (C11-59)

⚠2 INK STAMP SERIAL NUMBER, ASSEMBLY NAME & NUMBER ON COMPONENT SIDE APPROX. WHERE SHOWN.

1. REFERENCE SCHEMATIC 431887.
NOTES: UNLESS OTHERWISE SPECIFIED

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DOCUMENT TITLE: PCB ASSY, 1250-54B

SIZE	CODE IDENT NO	DOCUMENT NO	REV
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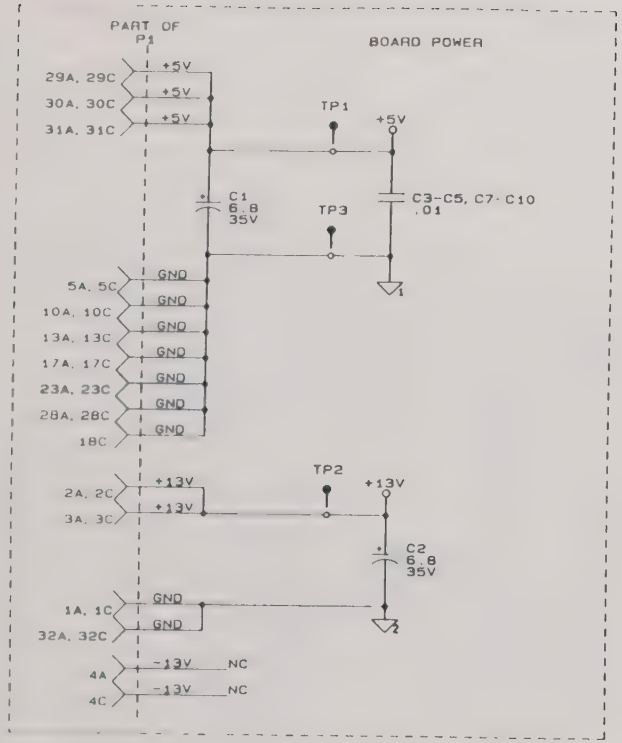
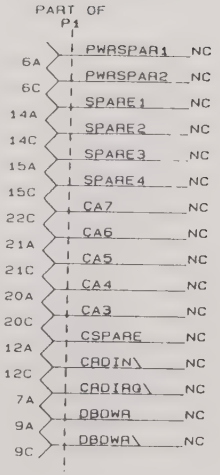
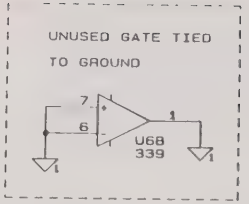
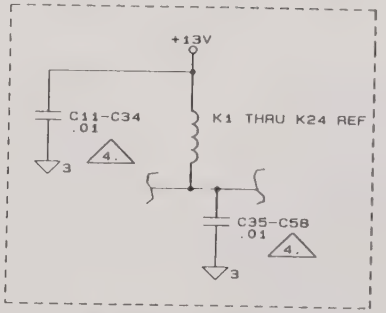
SCALE — | SHEET 1 OF 2

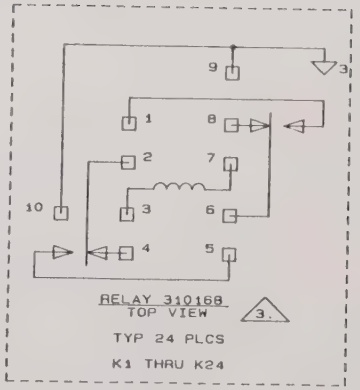
6-123











REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15	2803A		10		9
U8, 11, 14	74HC240	20		10	
U7, 10, 13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

HIGHEST REF. DES.
Z9
K2
U15
TP3
RV1
P1
K24
J36
C58

4. FOR LOCATION OF CAPACITORS C11-58.

3. RELAYS K1 THRU K24 ARE RACAL DANA P/N 310168. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION. ALL RELAY CASES TIED TO GND THRU PINS 9 & 10.

2. RESISTOR NETWORKS ARE IN OHMS, +/-2%.

1. CAPACITOR VALUES ARE IN MICROFARADS, +/-20%, 50V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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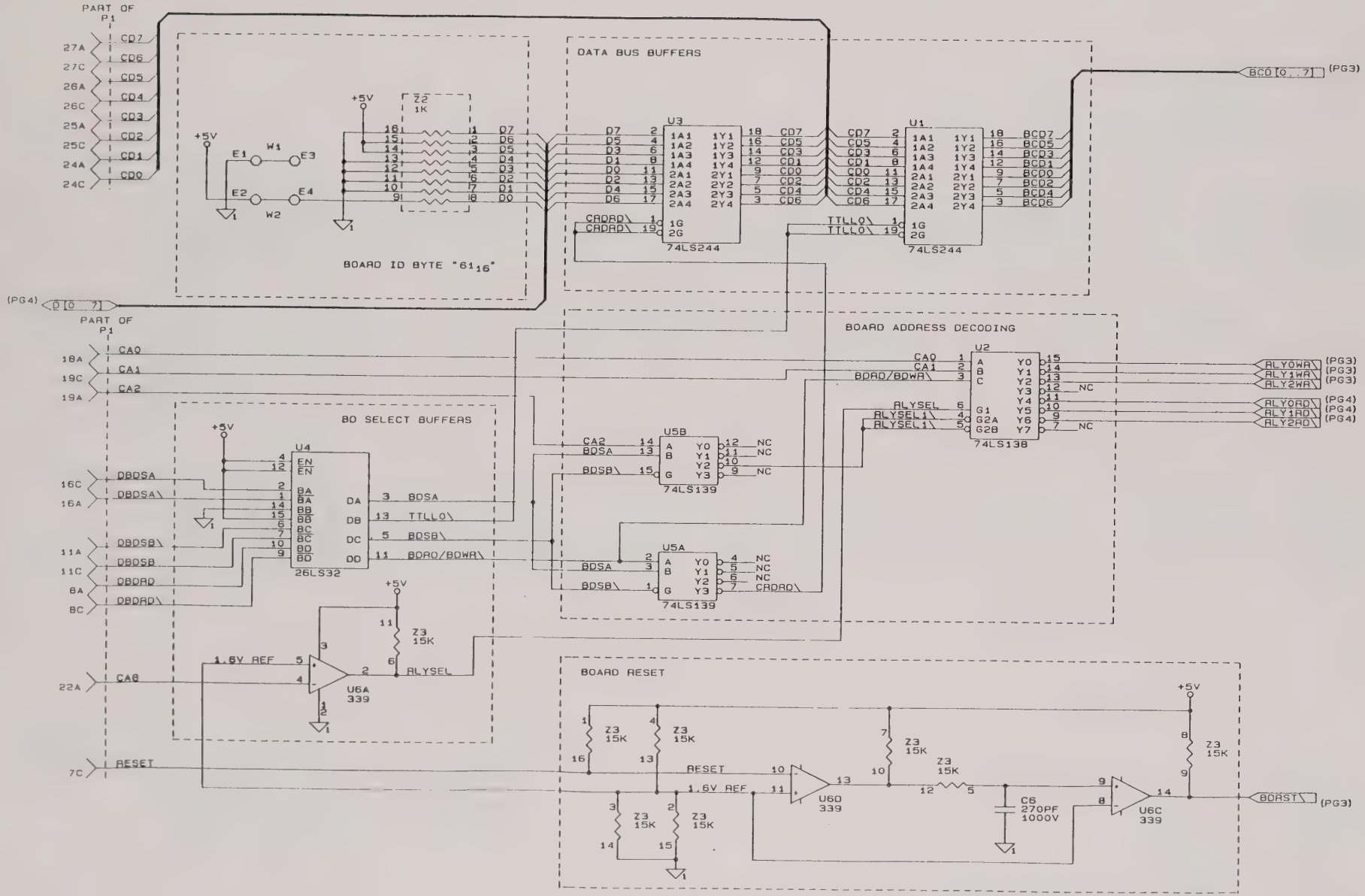
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

SCHEM.,1250-54/55

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431887	A

SCALE ——— SHEET 1 OF 6



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
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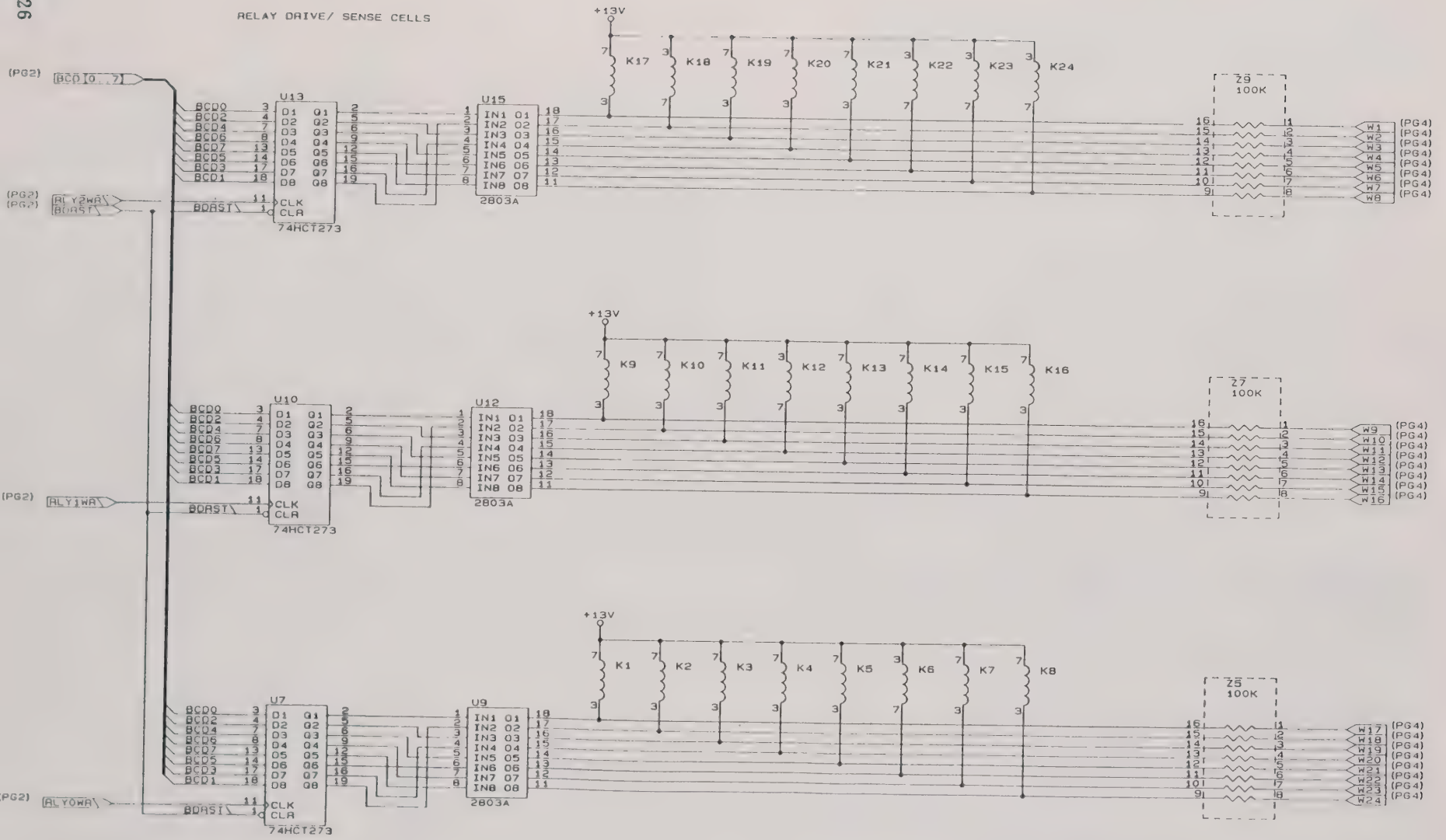
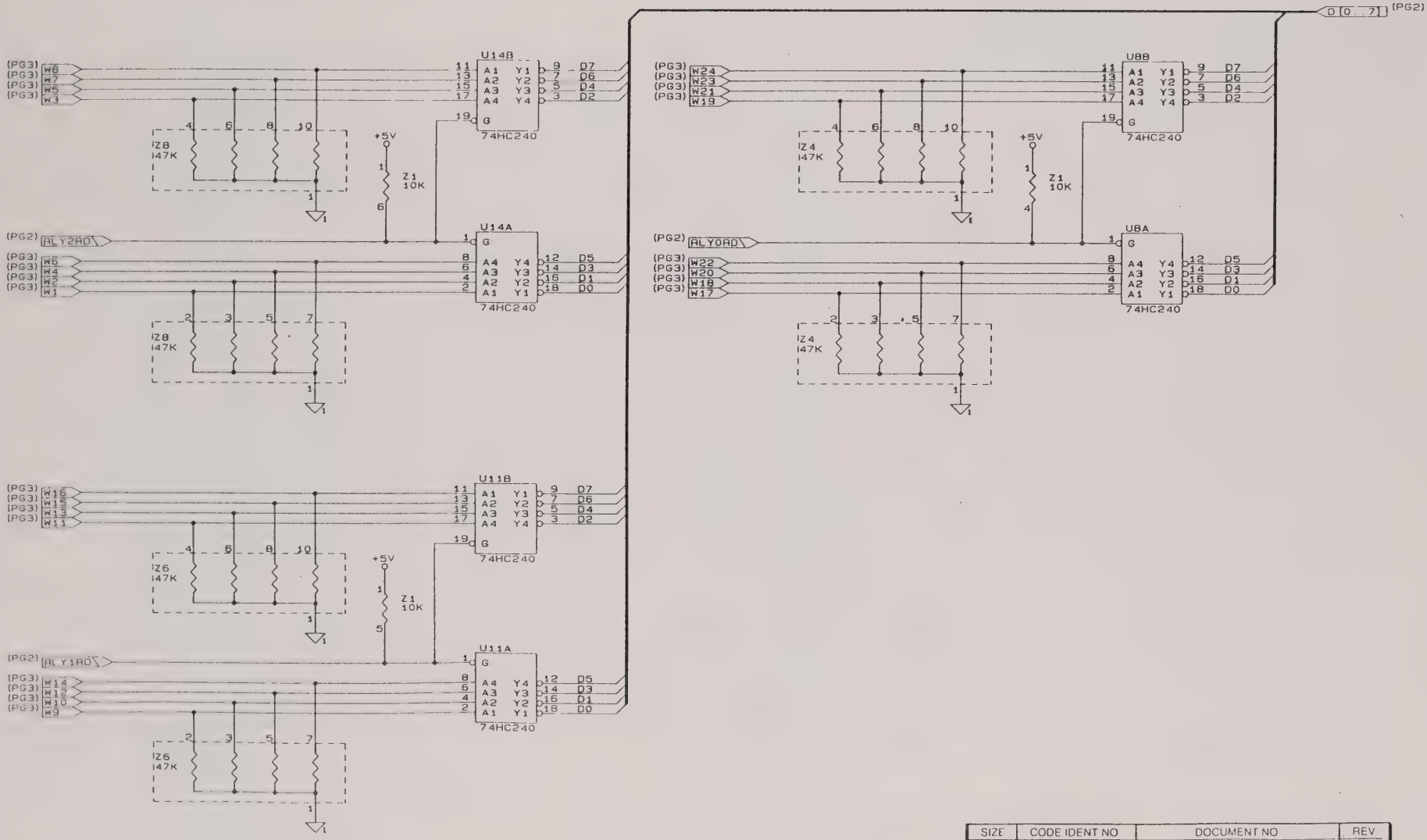
SCALE		SHEET 2 OF 6	



SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431887	A
SCALE		SHEET 3 OF 6	

RELAY DRIVE/ SENSE CELLS



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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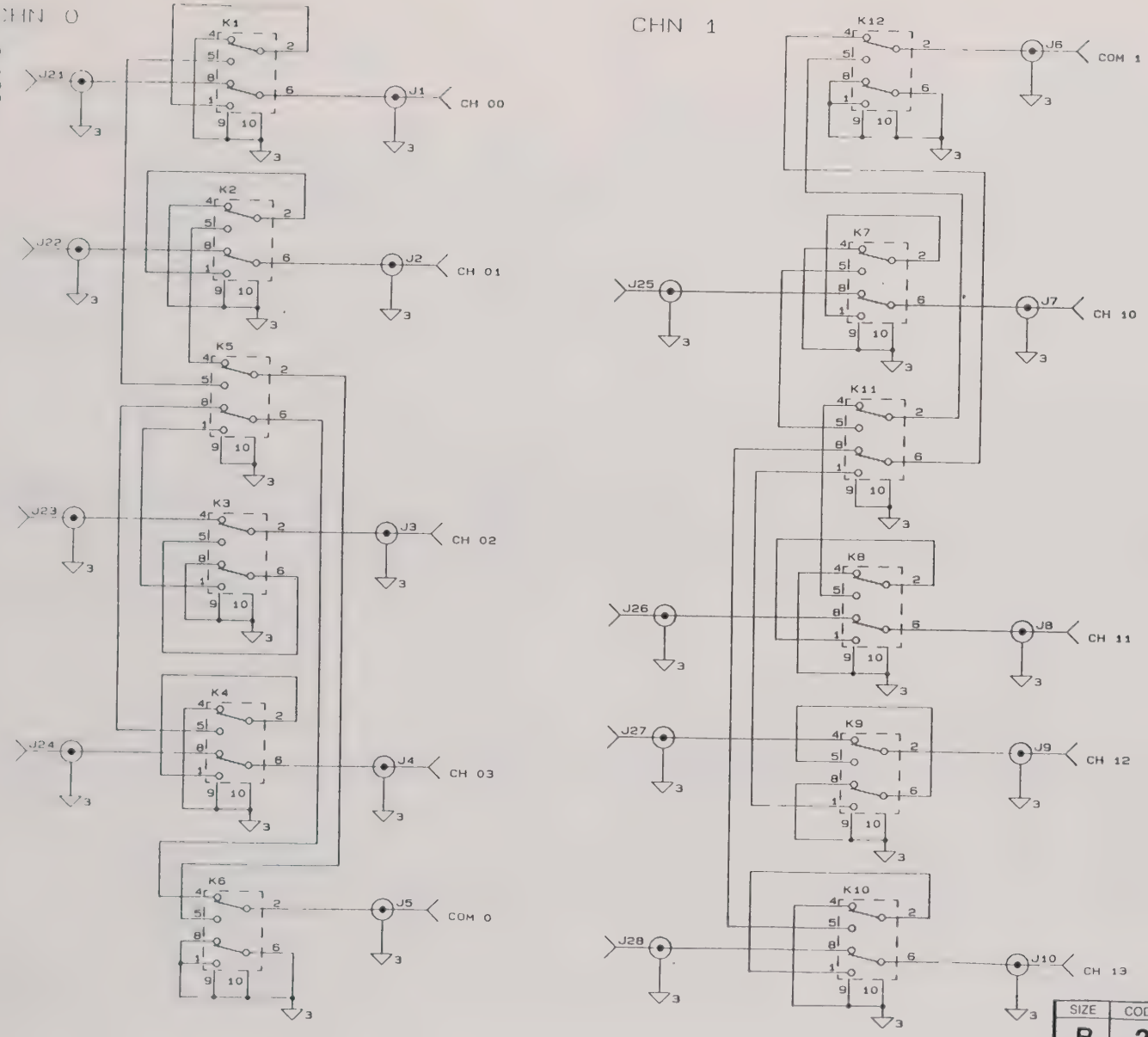

SIGNAL SWITCHING

SIZE	CODE IDENT NO.	DOCUMENT NO	REV
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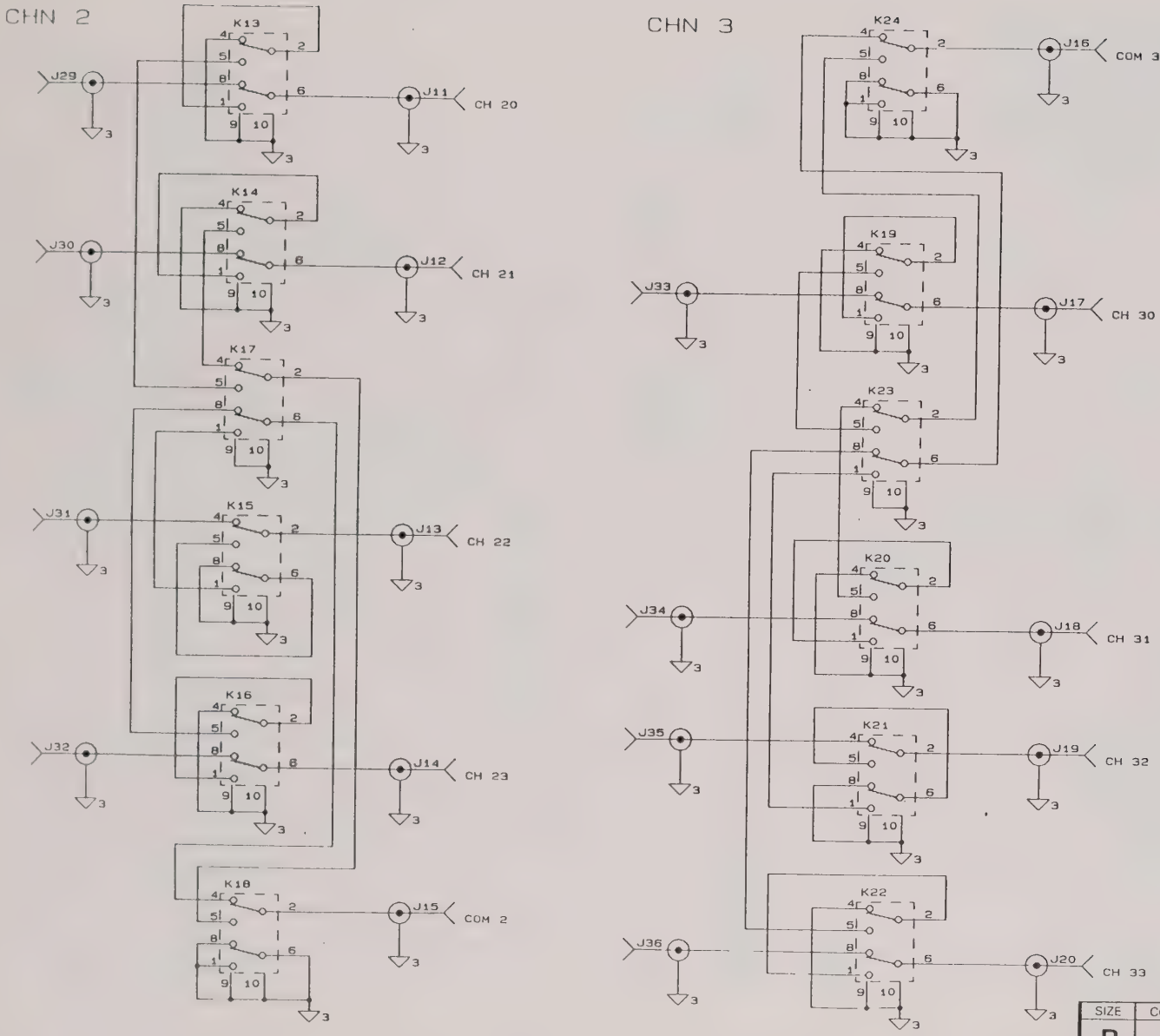
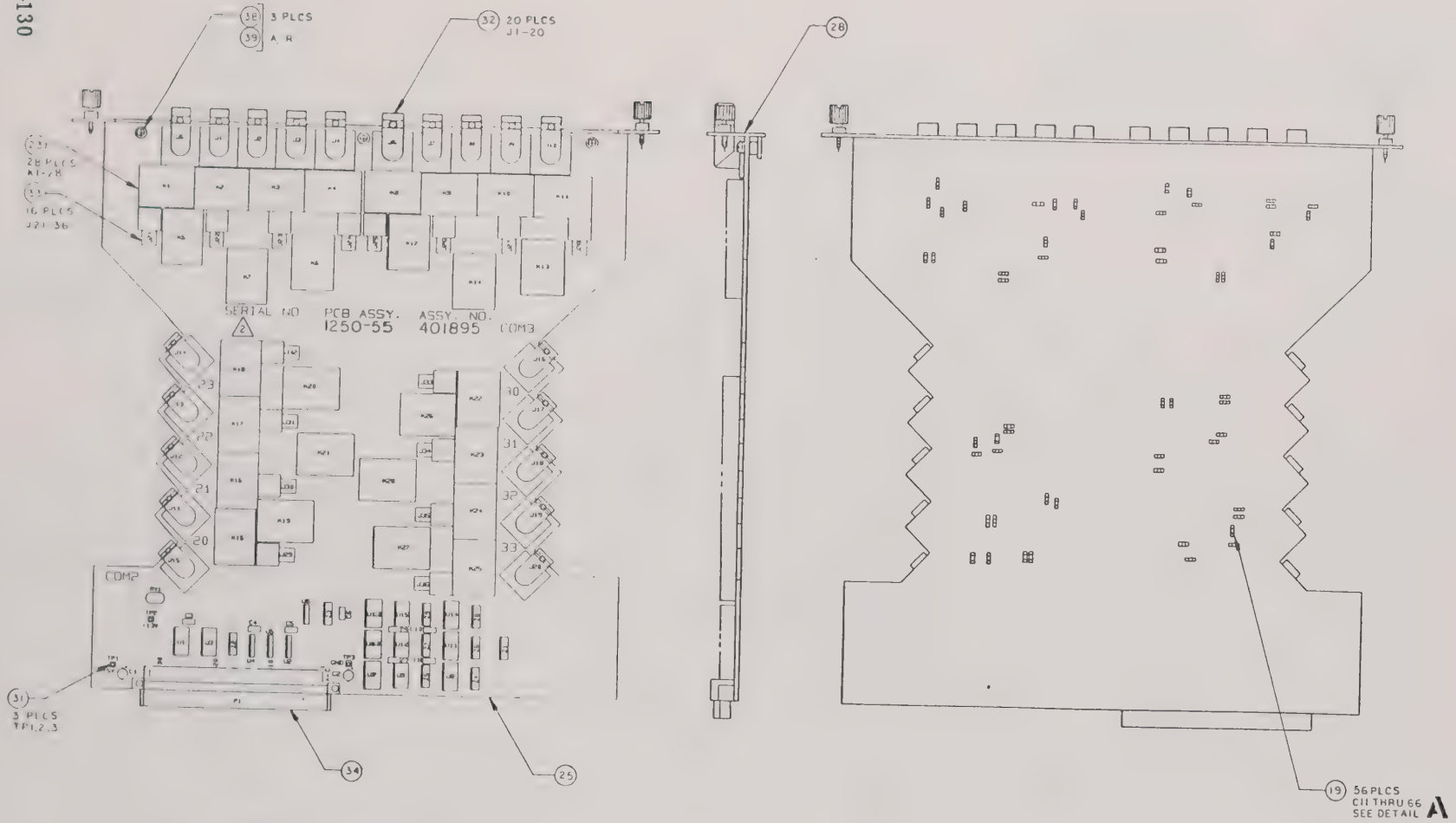
SCALE		SHEET 5 OF 6	



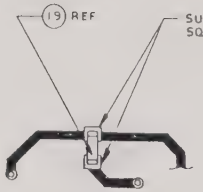
SIGNAL SWITCHING

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431887	A
SCALE		SHEET 6 OF 6	



COMPONENT SIDE
(NEAR SIDE)

CIRCUIT SIDE
(FAR SIDE)



DETAIL A
SCALE: NONE
TYPICAL SURFACE MOUNTING, 56 PLCS (C11 THRU 66)

2 INK STAMP SERIAL NUMBER ON COMPONENT SIDE APPROX. WHERE SHOWN

1. REFERENCE SCHEMATIC 431895.

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RACAL-DANA Instruments Inc.			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, 1250-55			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
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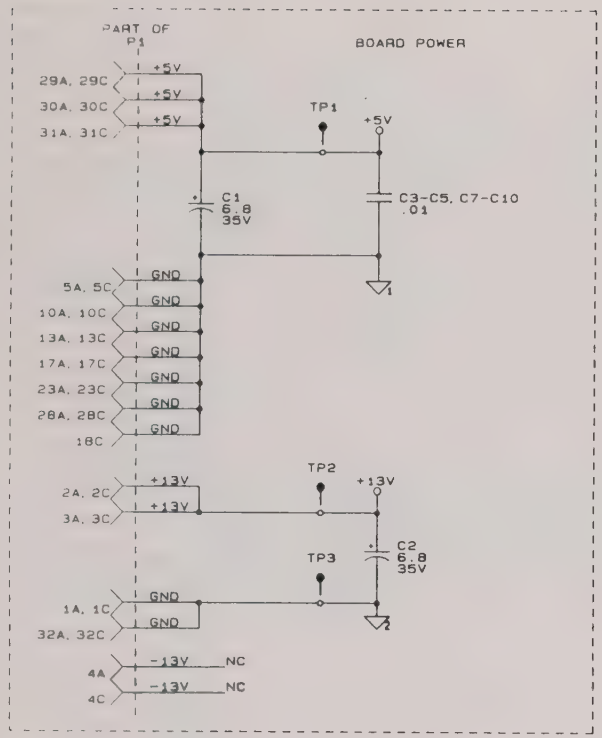

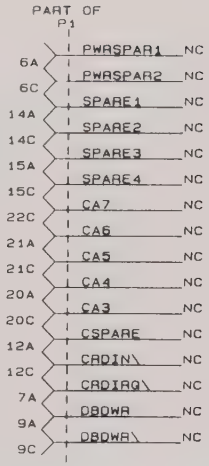

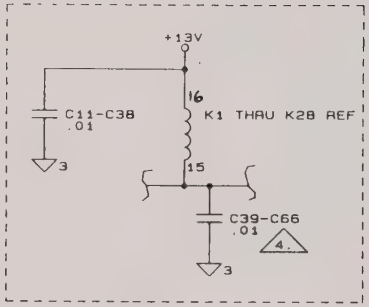

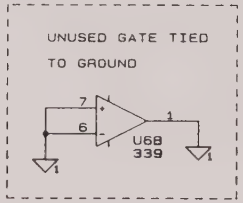

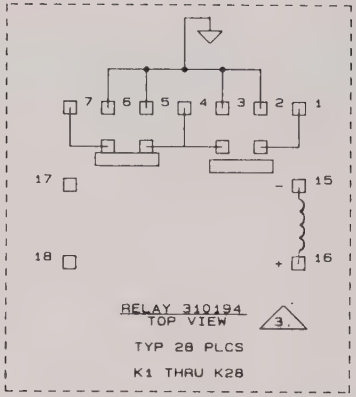

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15	2803A		10		9
U8, 11, 14	74HC240	20		10	
U7, 10, 13	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	16		8	
U1, 3	74LS244	20		10	
				1	2

IC POWER CONNECTIONS

HIGHEST REF. DES.
Z9
U15
TP3
RV1
P1
K28
J36
C66

4 FOR LOCATION OF CAPACITORS C39-C66.

3 RELAYS K1 THRU K28 ARE RACAL DANA P/N 310194. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.

2. RESISTOR NETWORKS ARE IN OHMS.

1 CAPACITOR VALUES ARE IN MICROFARADS. +/-20%. 50V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

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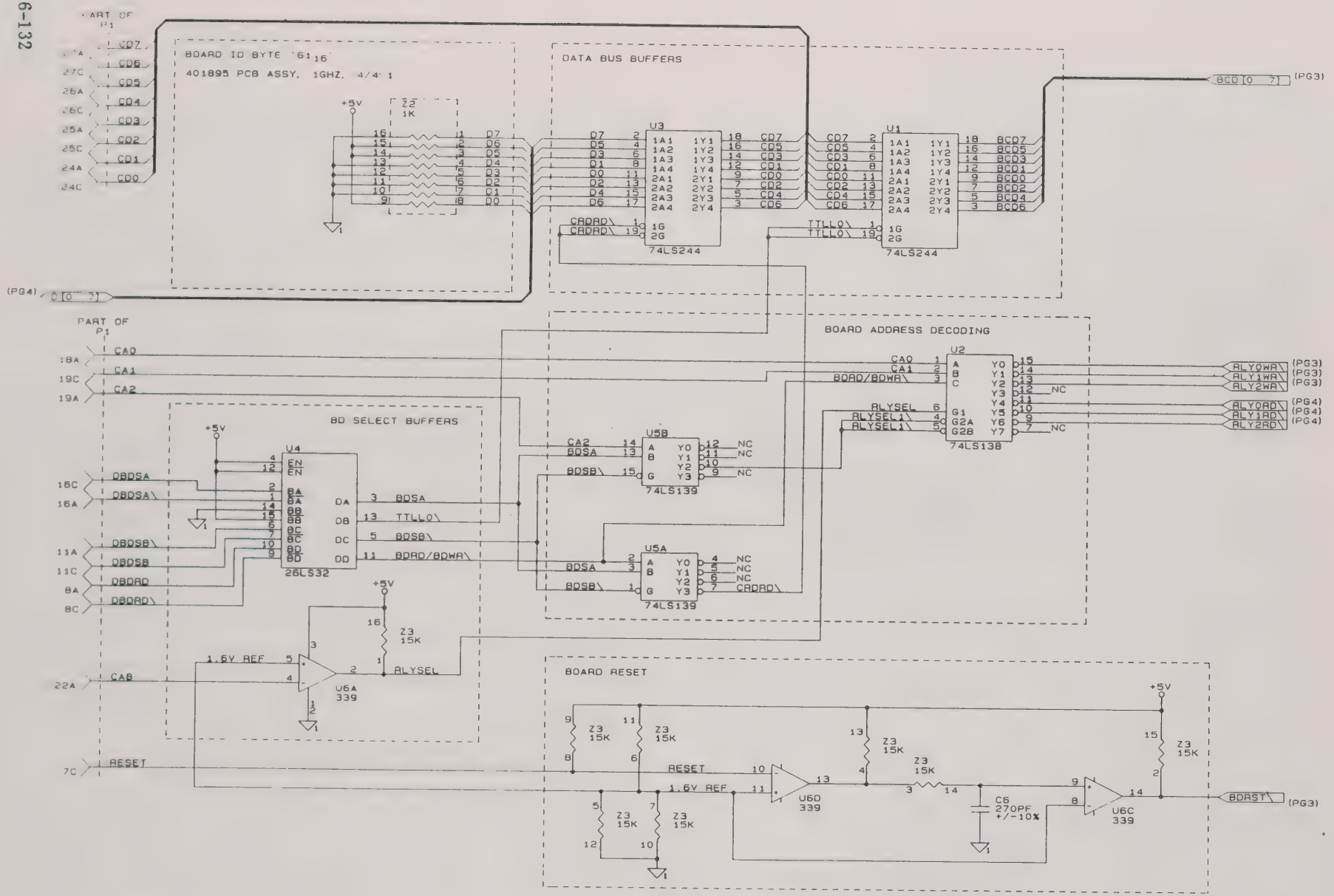
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE
SCHEM., 1250-55

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431895	A

SCALE ——— SHEET 1 OF 6



SIZE	CODE IDENT NO	DOCUMENT NO	REV
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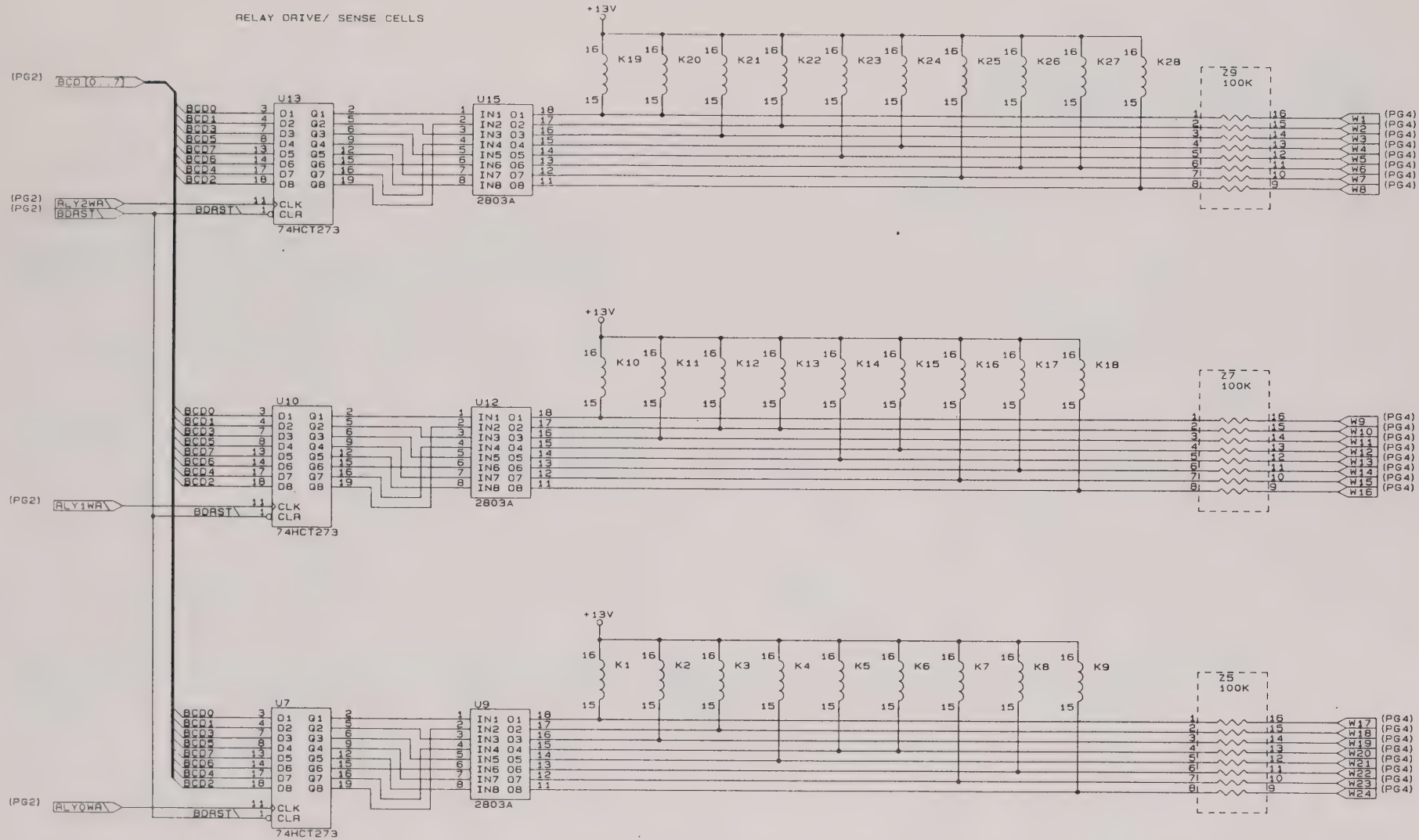
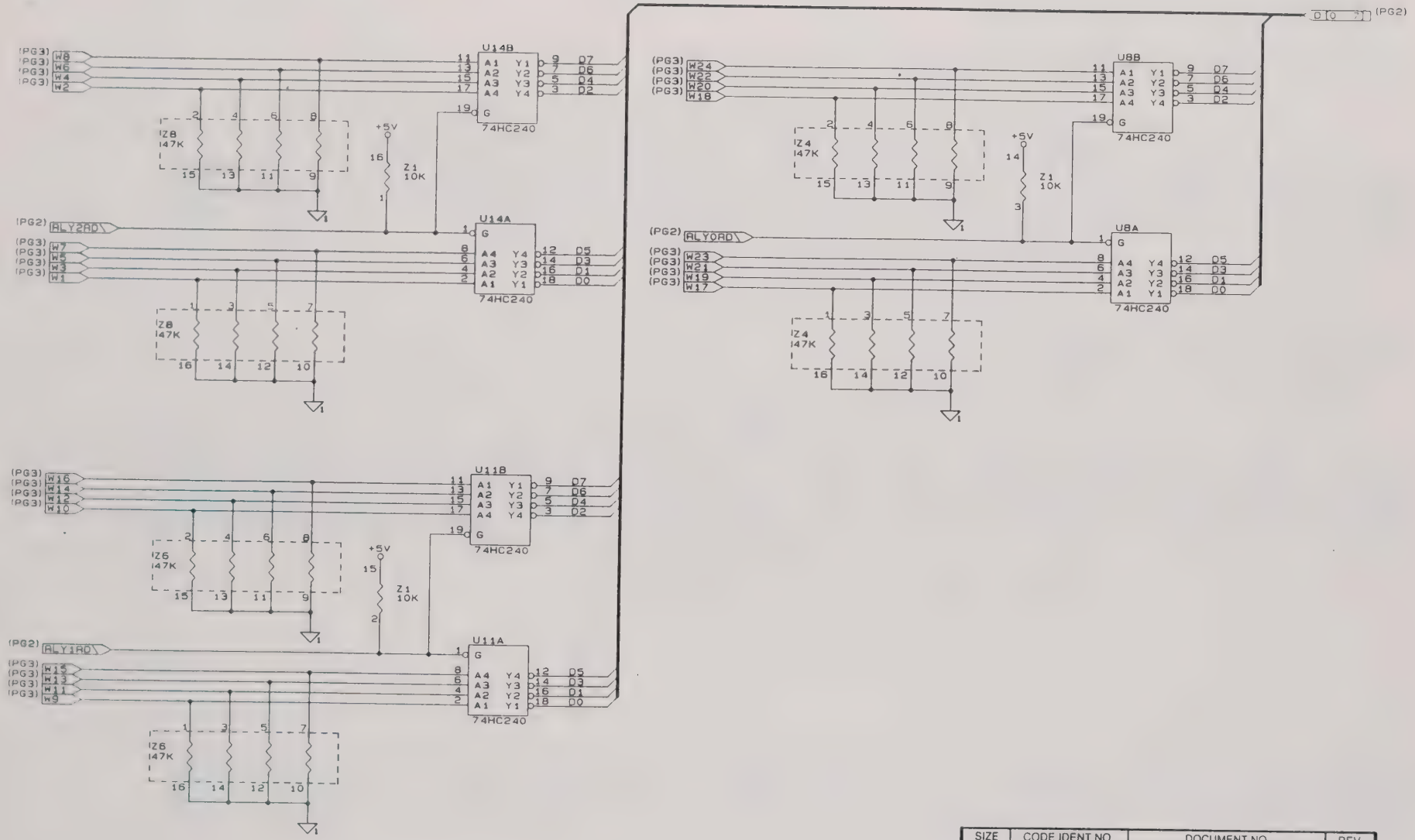
SCALE		SHEET 2 OF 6	

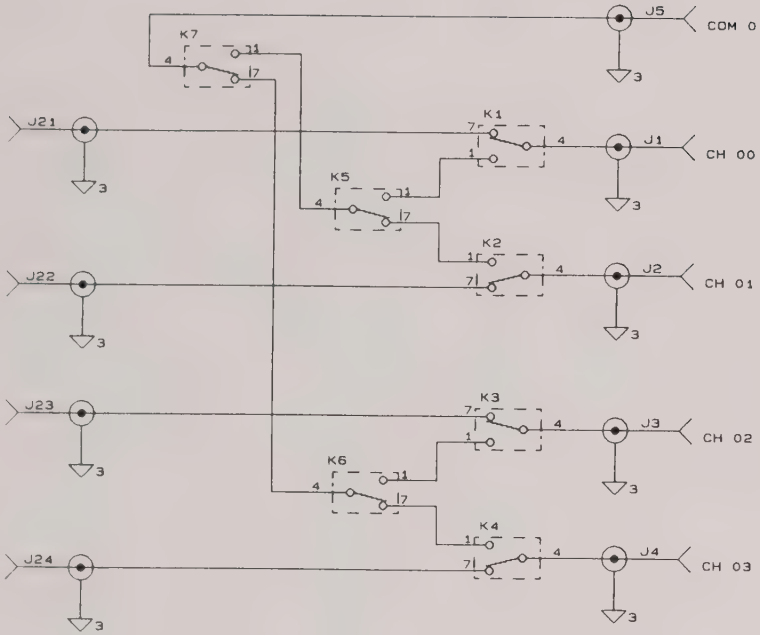


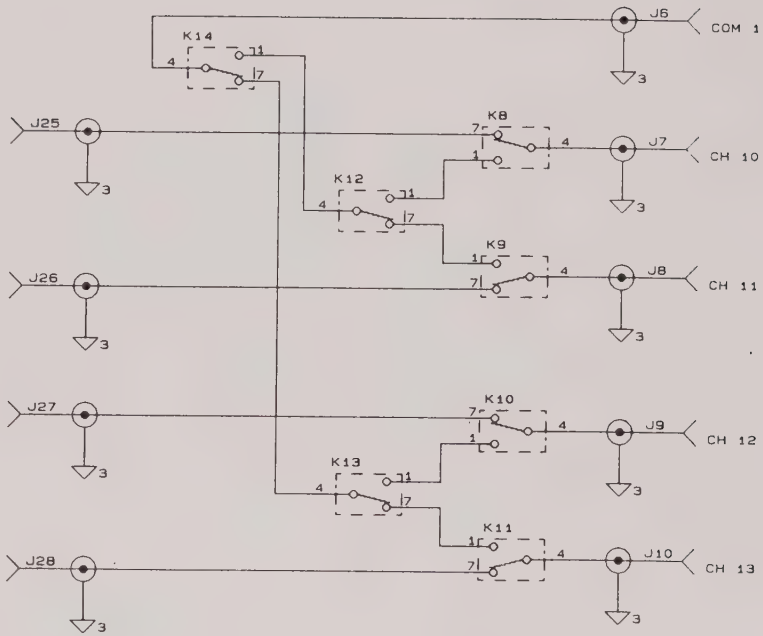
SIZE	CODE IDENT NO	DOCUMENT NO.	REV
B	21793	431895	A
SCALE ———		SHEET 3 OF 6	

RELAY DRIVE/ SENSE CELLS

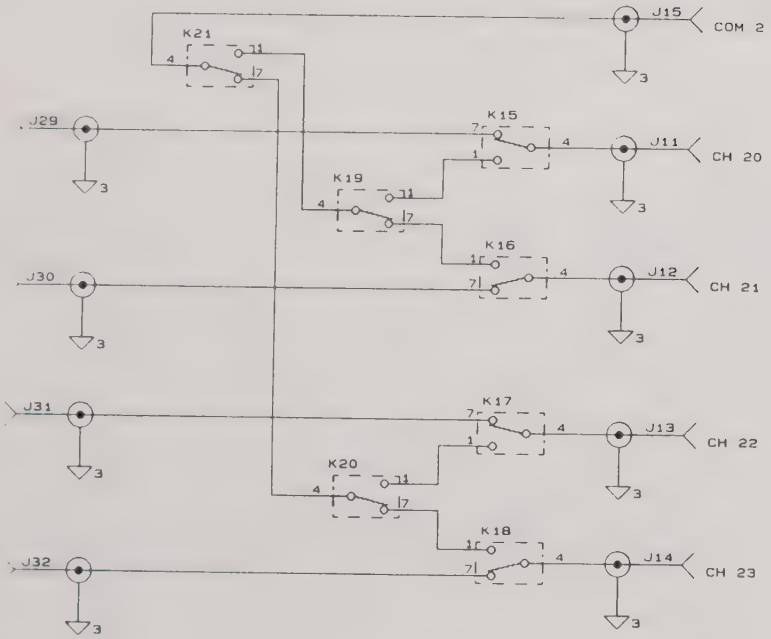


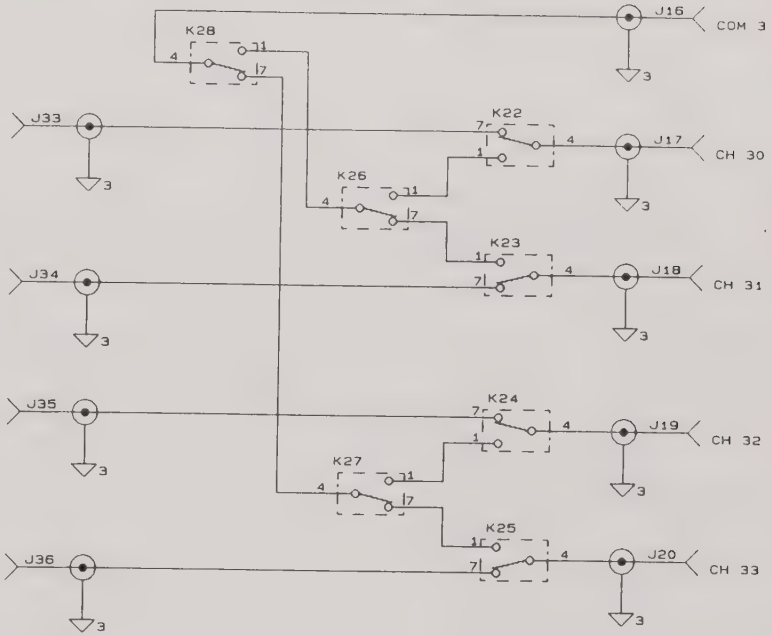
SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431895	A
SCALE		SHEET 4 OF 6	

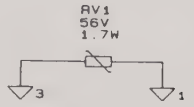




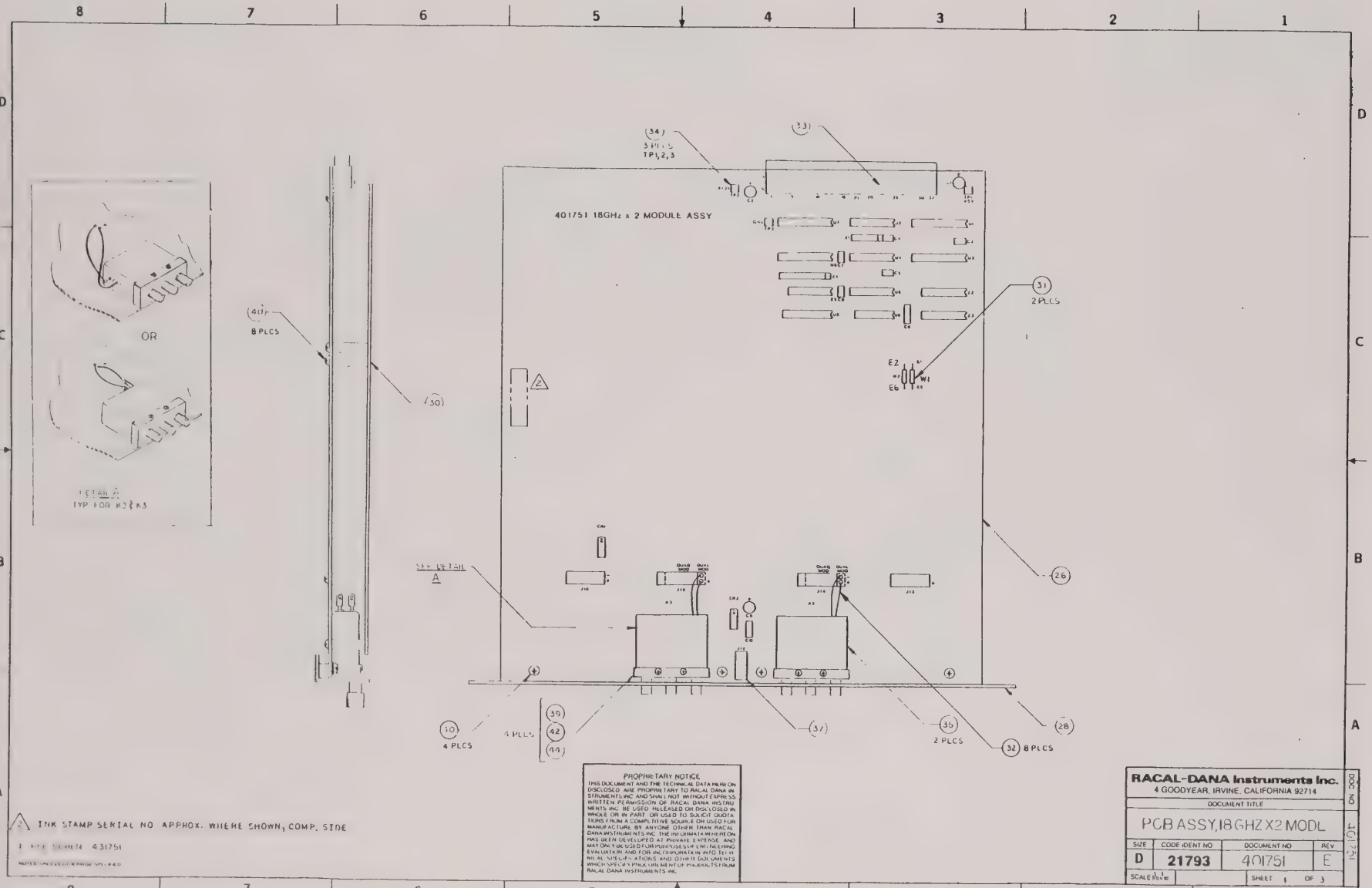
SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	431895	A
SCALE ———		SHEET 5 OF 6	

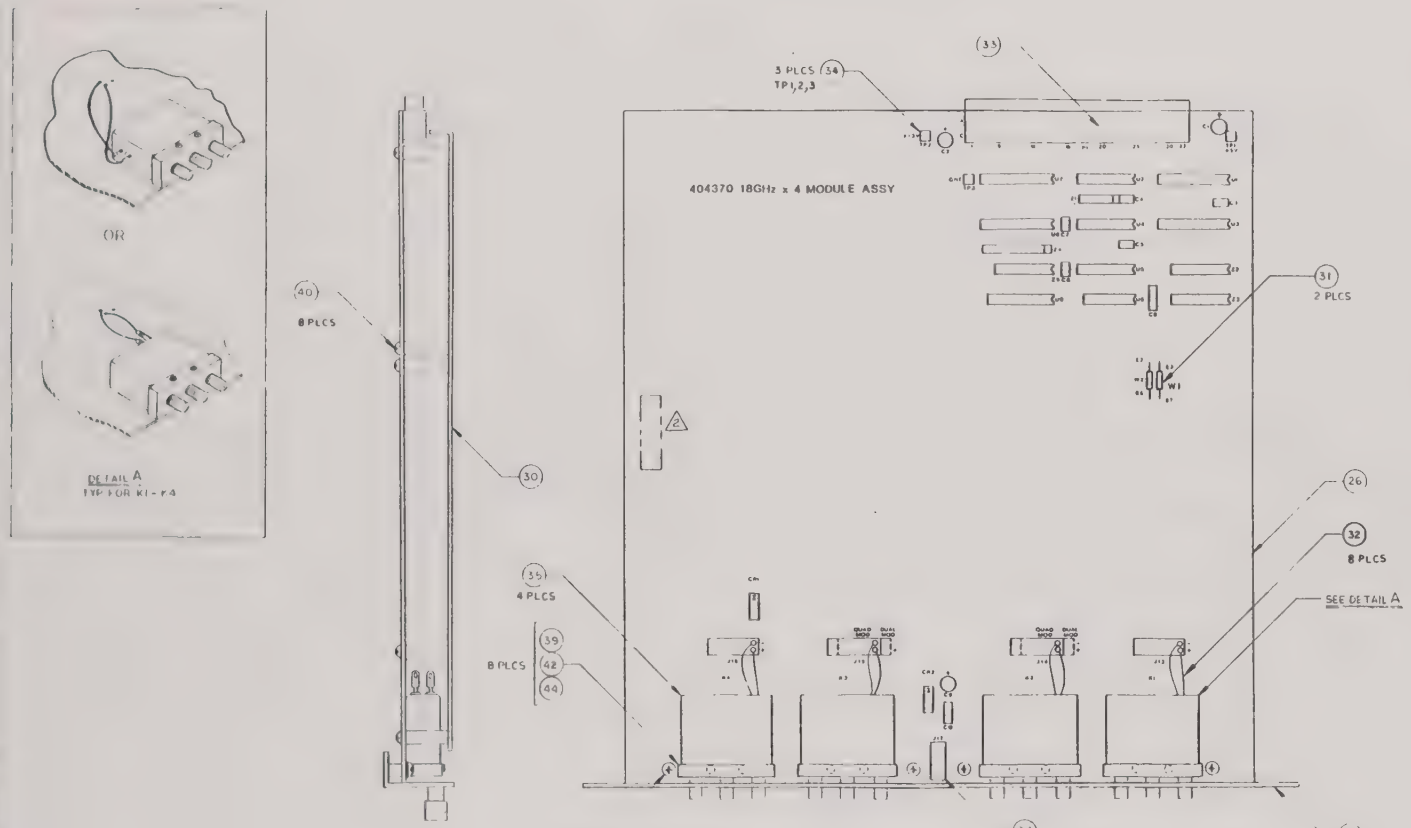






SIZE	CODE IDENT NO	DOCUMENT NO	REV.
B	21793	431895	A
SCALE		SHEET 6 OF 6	


401751 18GHz x 2 MODULE ASSY
DETAIL A
TYP FOR K2 & K3
OR
SEE DETAIL A
8 PLCS
2 PLCS
4 PLCS
2 PLCS
8 PLCS
INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714
DOCUMENT TITLE
PCB ASSY, 18 GHZ X2 MODL
SIZE
CODE/IDENT NO
DOCUMENT NO
REV
D
21793
401751
E
SCALE
SHEET 1 OF 3



3 BAG & IDENTIFY ITEMS 16 & 38 WITH RACAL-DANA PART NO. 601296, 601249.

2 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

1 REF SCHEM 351794

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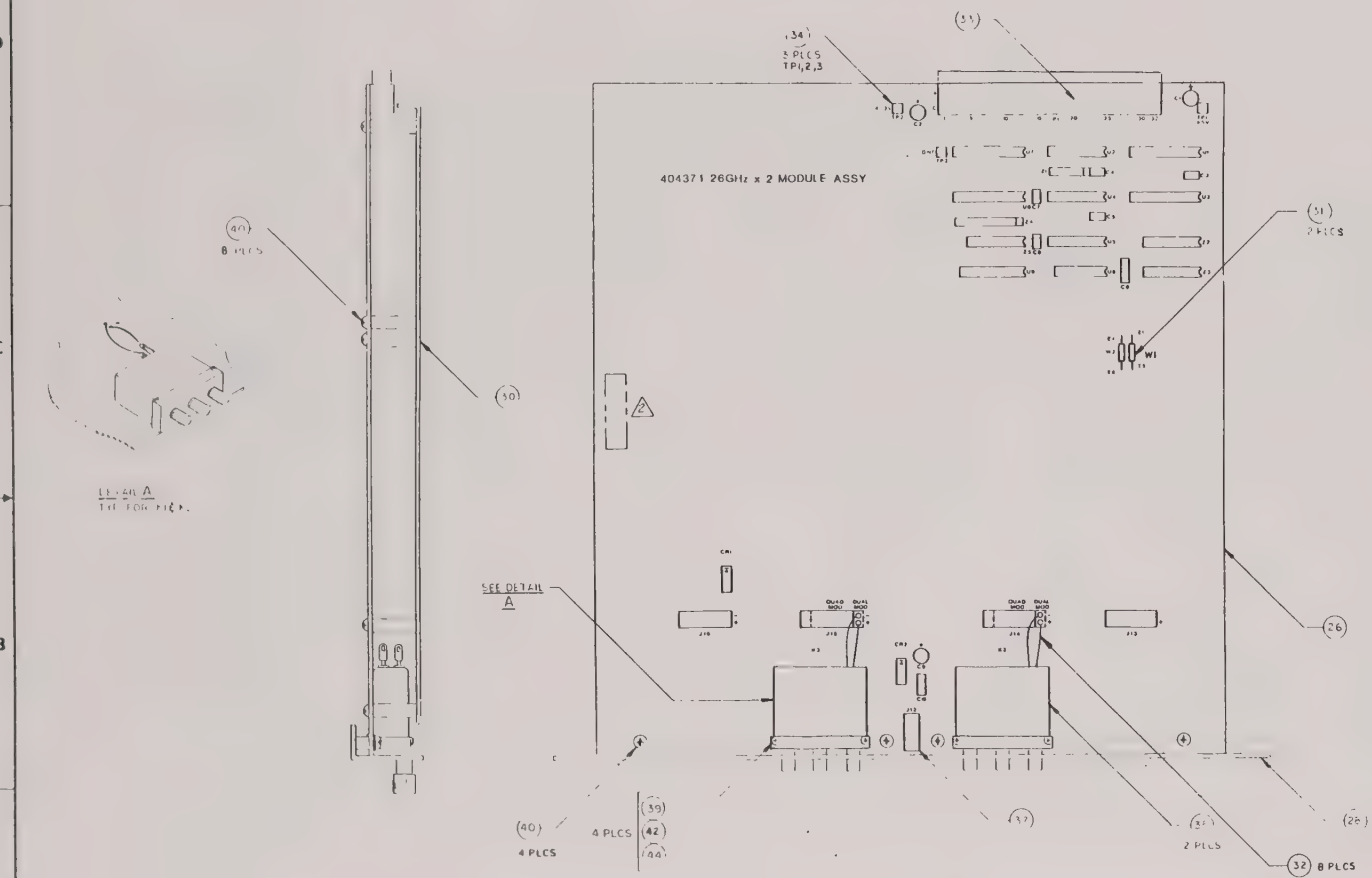
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE: PCB ASSY, 18GHz x 4 MODL

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404370	D

SCALE NONE | SHEET 1 OF 3



2 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

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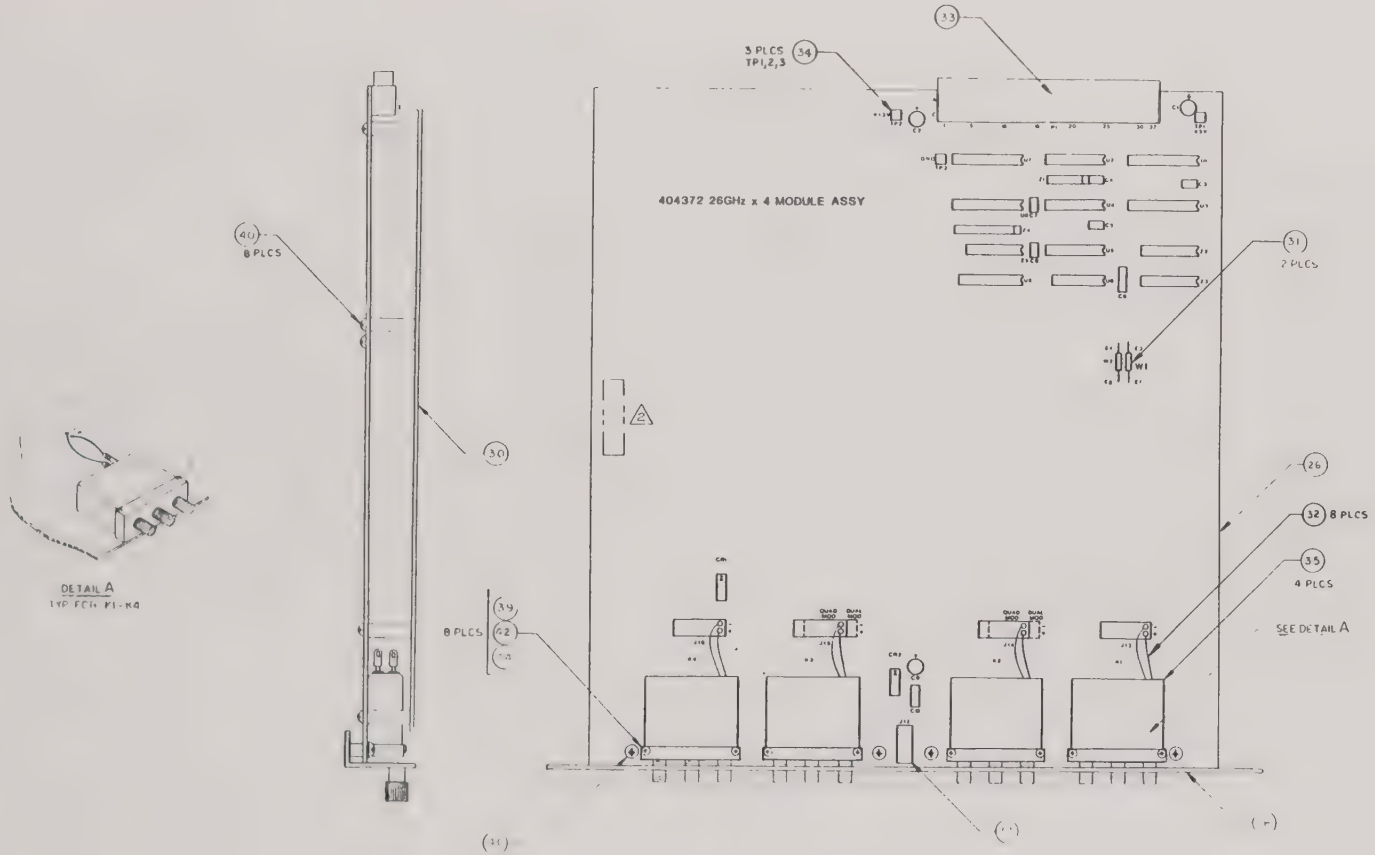
RACAL-DANA Instruments Inc. 4 GOODYEAR IRVINE CALIFORNIA 92714			
DOCUMENT TITLE: PCB ASSY 26GHZ XP MODL			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404371	E
SCALE NONE		SHEET 1 OF 3	



5. BAG AND IDENTIFY ITEMS 46 AND 47 WITH RACAL-DANA PART NUMBERS 601,36 AND 601245
2 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.

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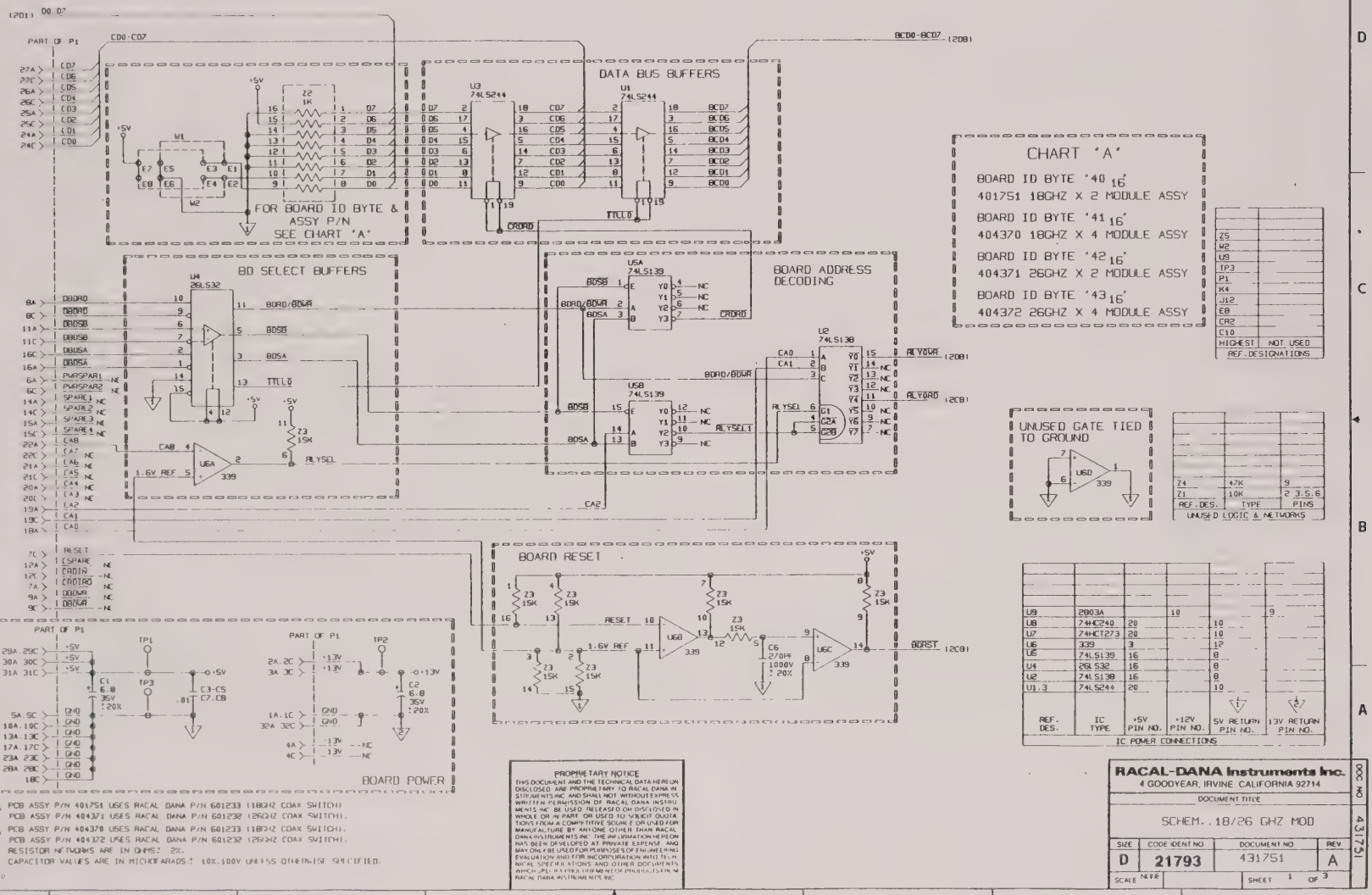
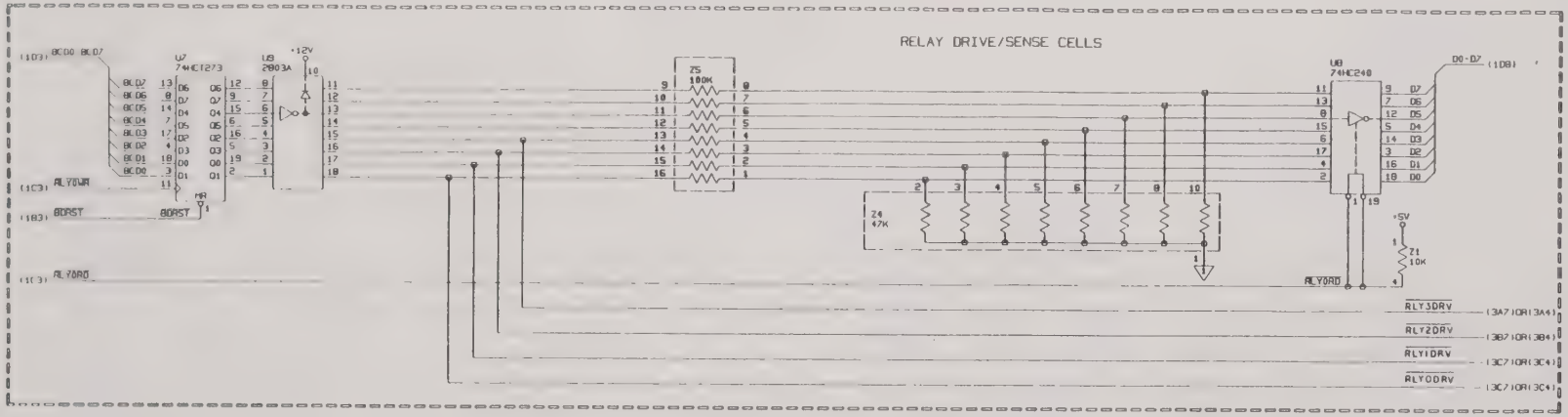
RACAL-DANA Instruments Inc.
4 GOODYEAR IRVINE CALIFORNIA 92714

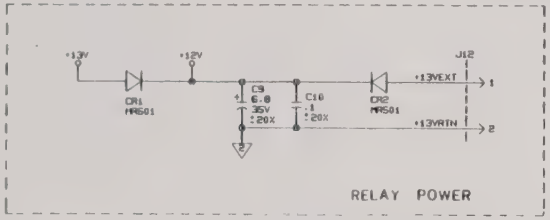
DOCUMENT TITLE			
PCB ASSY, 26GHZ X 4 MODL			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404372	E
SCALE		SHEET 1 OF 1	

DO NOT SCALE


DATA BUS BUFFERS
FOR BOARD ID BYTE & ASSY P/N SEE CHART 'A'
BD SELECT BUFFERS
BOARD ADDRESS DECODING
BOARD RESET
BOARD POWER
PART OF P1
BCD0-BCD7
CHART 'A'
BOARD ID BYTE '40 16' 401751 18GHZ X 2 MODULE ASSY
BOARD ID BYTE '41 16' 404370 18GHZ X 4 MODULE ASSY
BOARD ID BYTE '42 16' 404371 26GHZ X 2 MODULE ASSY
BOARD ID BYTE '43 16' 404372 26GHZ X 4 MODULE ASSY
UNUSED GATE TIED TO GROUND
UNUSED LOGIC & NETWORKS
IC POWER CONNECTIONS
PROPRIETARY NOTICE
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714
SCHEM. 18/26 GHZ MOD
SIZE D
CODE IDENT NO 21793
DOCUMENT NO 431751
REV A
SCALE NONE
SHEET 1 OF 3

6-141

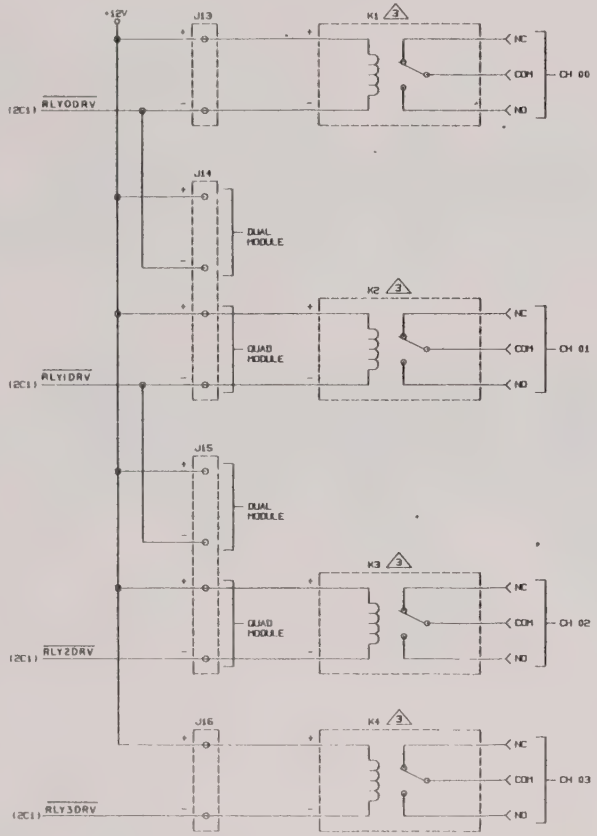




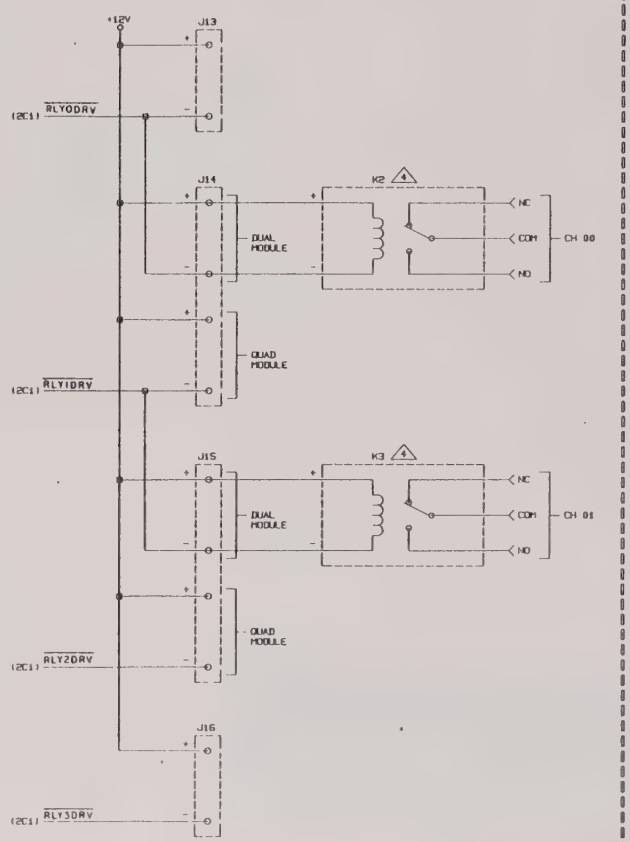
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431751	A
SCALE NONE		SHEET 2 OF 3	

DOC NO 431751

SIGNAL SWITCHING FOR ASSYS
404370 (18GHZ X 4 MODULE ASSY) &
404372 (26GHZ X 4 MODULE ASSY) ONLY.

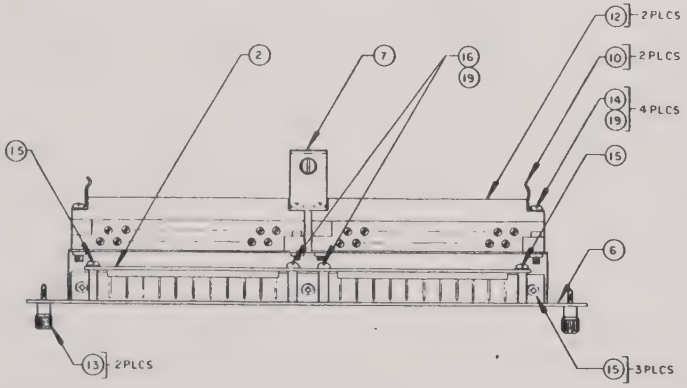


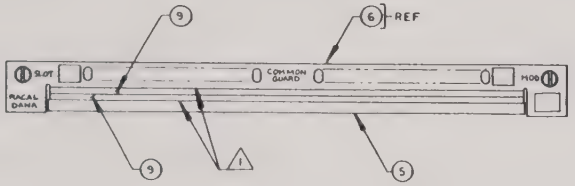
SIGNAL SWITCHING FOR ASSYS
401751 (18GHZ X 2 MODULE ASSY)
404371 (26GHZ X 2 MODULE ASSY) ONLY.

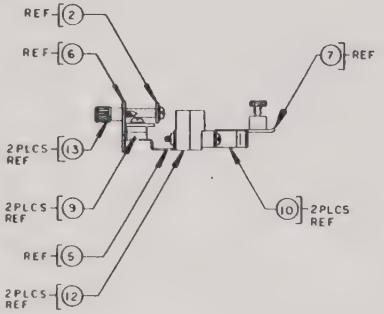


SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431751	A
SCALE NONE		SHEET 3 OF 3	

DOC NO 431751







2. BAG & IDENTIFY ITEM 20 WITH RACAL-DANA PART NUMBER 601237.

1 APPLY ITEM 9 WITH ADHESIVE SIDE AT INDICATED POINTS.

NOTES: UNLESS OTHERWISE SPECIFIED

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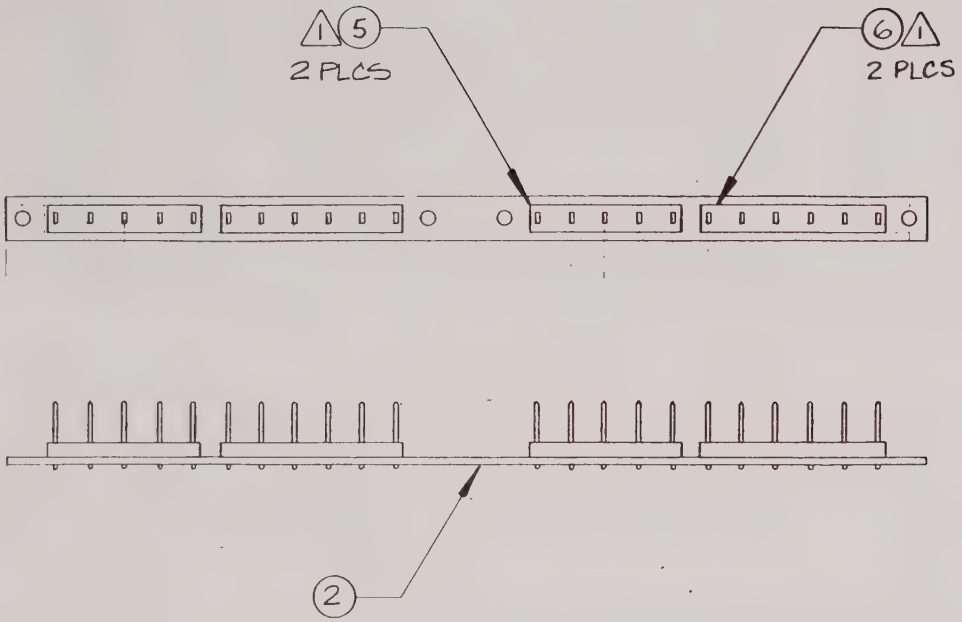
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE CALIFORNIA 92714

DOCUMENT TITLE: TERMINAL BLK ASSY, QD

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404381	B

SCALE — SHEET 1 OF 2

DOC NO 404381



2. PCB HANDLING TO CONFORM TO CLEANING CODE A OF RACAL-DANA DOCUMENT 900325.

1. ITEM # 5 & 6 SHOULD BE FLUSH TO P.C.BOARD.

NOTES: UNLESS OTHERWISE SPECIFIED

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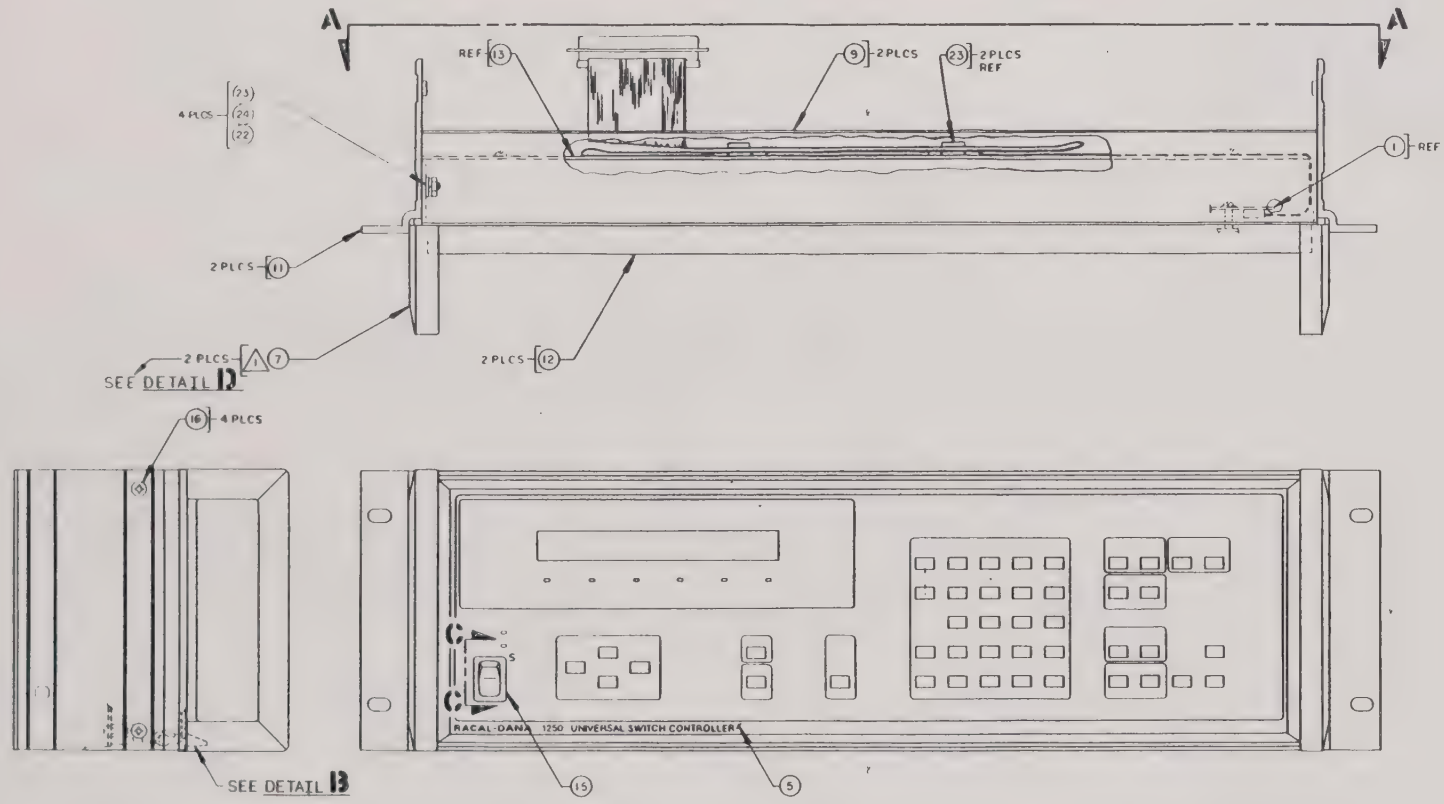
RACAL-DANA Instruments Inc.
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

PCB ASSY, SHIELD COM.

SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	401761	D

SCALE NONE SHEET 1 OF 2



3. BAG & IDENTIFY WITH RACAL DANA PART NUMBER, ITEM # 26 (615042)

2 WRAP TAPE ITEM 20, AROUND TOP AND BOTTOM EDGES OF THE FRONT PANEL (ITEM 3).

1 PRIOR TO INSTALLING HANDLES (ITEM 7) CENTER FOAM (ITEM 25) ON STEEL INSERT FLUSH WITH INSIDE OF PLASTIC HANDLE. DO NOT REMOVE PROTECTIVE BACKING

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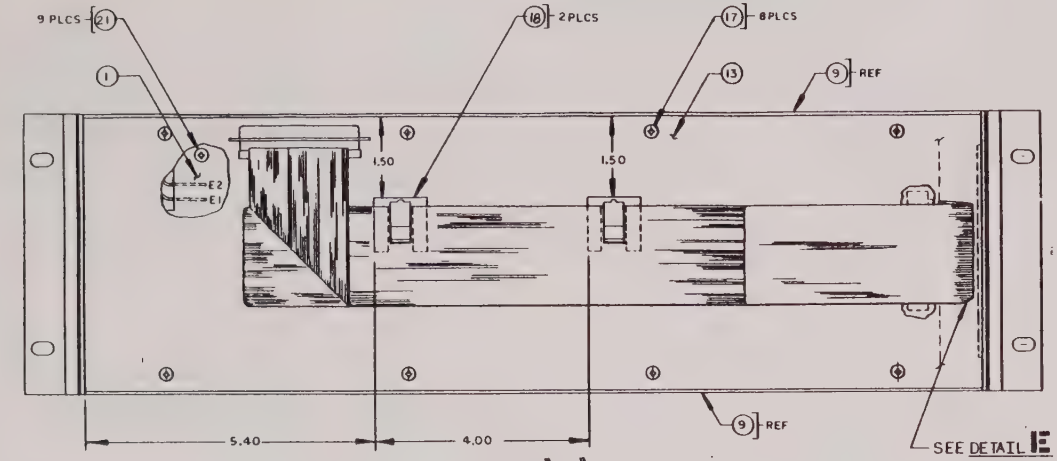
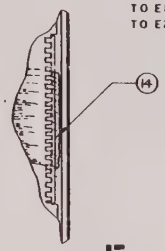
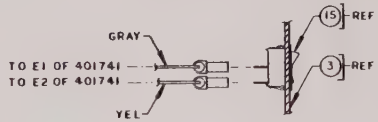
RACAL-DANA Instruments Inc.	
4 GOODYEAR, IRVINE CALIFORNIA 92714	
DOCUMENT TITLE	KEYBRD. DISPLAY, ASSY
SIZE: D	CODE IDENT NO: 21793
DOCUMENT NO: 404363	REV: B
SCALE 1:1	SHEET 1 OF 3
DOC NO	404363



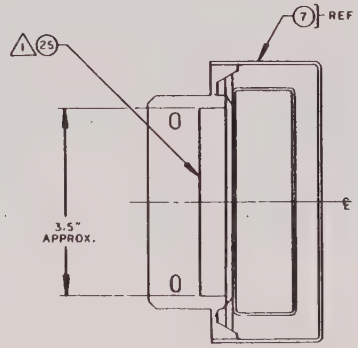
VIEW A-A
SCALE: NONE



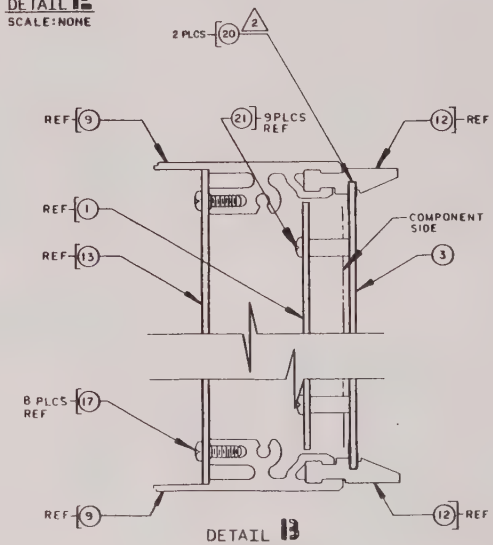
DETAIL E
SCALE: NONE



SECTION C-C
SCALE: NONE



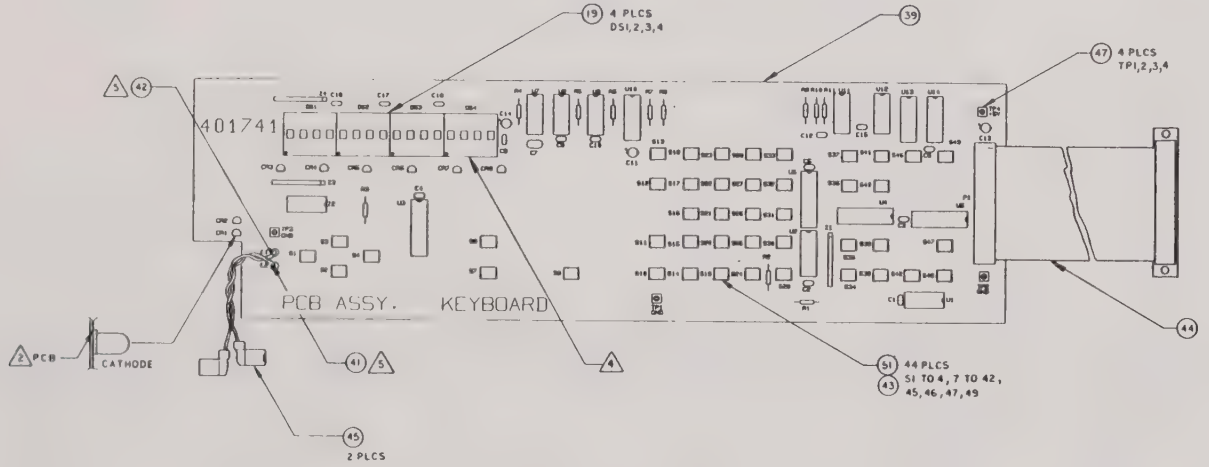
DETAIL D
TYPICAL: 2 PLCS
SCALE: NONE



DETAIL B
SCALE: NONE

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404363	B
SCALE		SHEET 2 OF 3	

DOC NO 404363



2 WIRE STRIPPED ONLY .25 BOTH ENDS

4 FOR ORIENTATION, SEE DOT OR THE MARKING "LK" ON SIDE OF THE PART

3 MAXIMUM COMPONENT HEIGHT TO BE 250 ABOVE PCB

2 CR1 - CR8 FIRMLY SEATED ON PCB

1 REF SCHEMATIC 431741

NOTES: UNLESS OTHERWISE SPECIFIED

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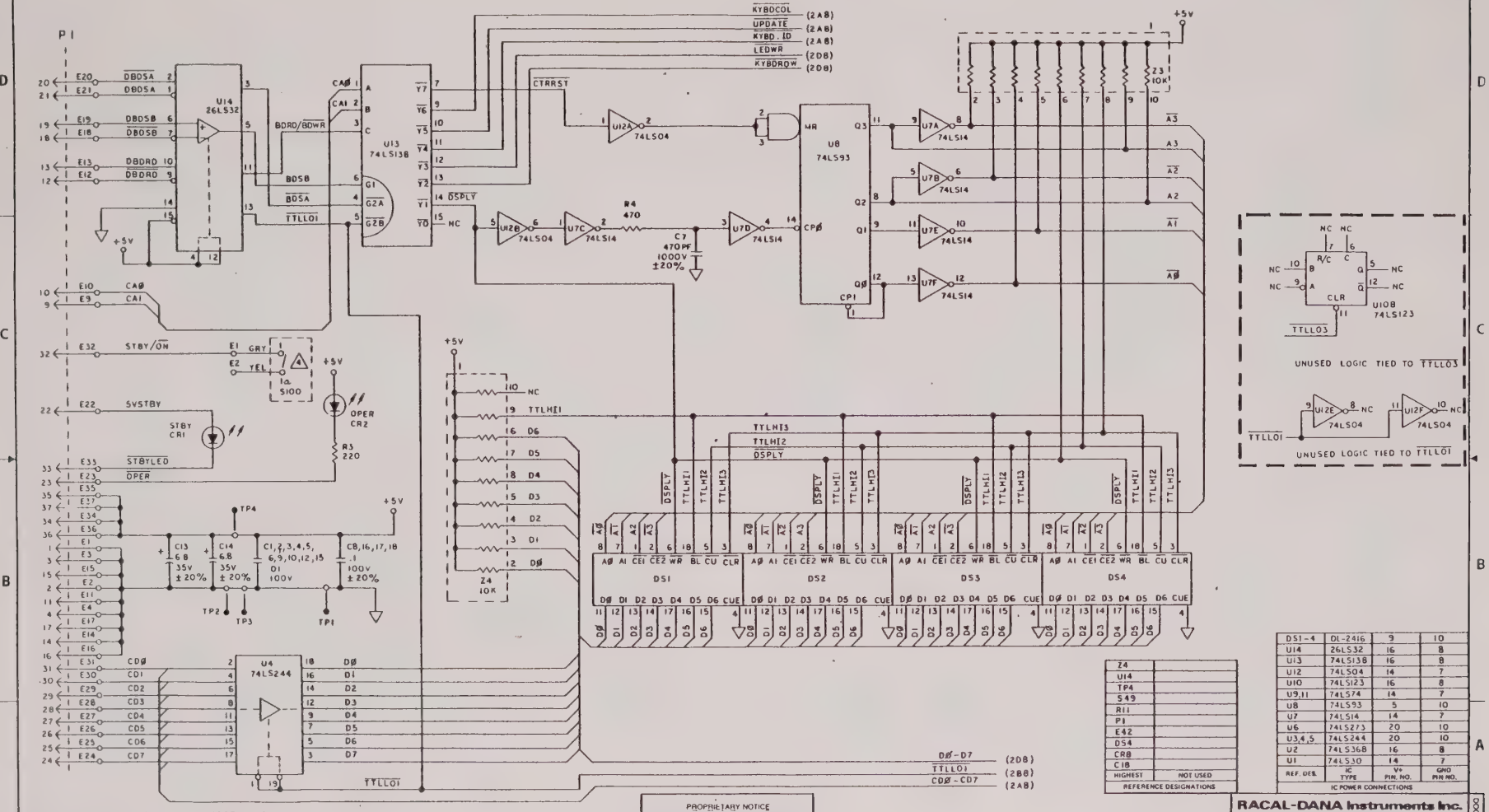
4 GOODYEAR IRVINE CALIFORNIA 92714

DOCUMENT TITLE
PCB ASSY, KYBD DSPLY

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401741	A

SCALE --- SHEET 1 OF 4

401741 SHEET 1 OF 4



Z4	
U14	
TP4	
S49	
R11	
P1	
E42	
DS4	
CR8	
C18	
HIGHEST	NOT USED

REFERENCE DESIGNATIONS

DS1-4	DL-2416	9	10
U14	26LS32	16	8
U13	74LS138	16	8
U12	74LS04	14	7
U10	74LS123	16	8
U9,11	74LS74	14	7
U8	74LS93	5	10
U7	74LS14	14	7
U6	74LS273	20	10
U3,4,5	74LS244	20	10
U2	74LS368	16	8
U1	74LS30	14	7
REF. DES.	IC TYPE	V+ PIN NO.	GND PIN NO.

IC POWER CONNECTIONS

6 CAPACITOR VALUES ARE IN MICROFARADS

5 CR1-CR8 ARE RACAL DANA P/N 210108.

4 PART OF FRONT PANEL.

3 C1-6, 9,10,12,15 ARE ± 10%.

2 ALL RESISTOR NETWORKS ± 2%.

1 RESISTOR VALUES ARE IN OHMS, ± 5%, 1/4 WATT.

NOTES UNLESS OTHERWISE SPECIFIED

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4 GOODYEAR, IRVINE CALIFORNIA 92714

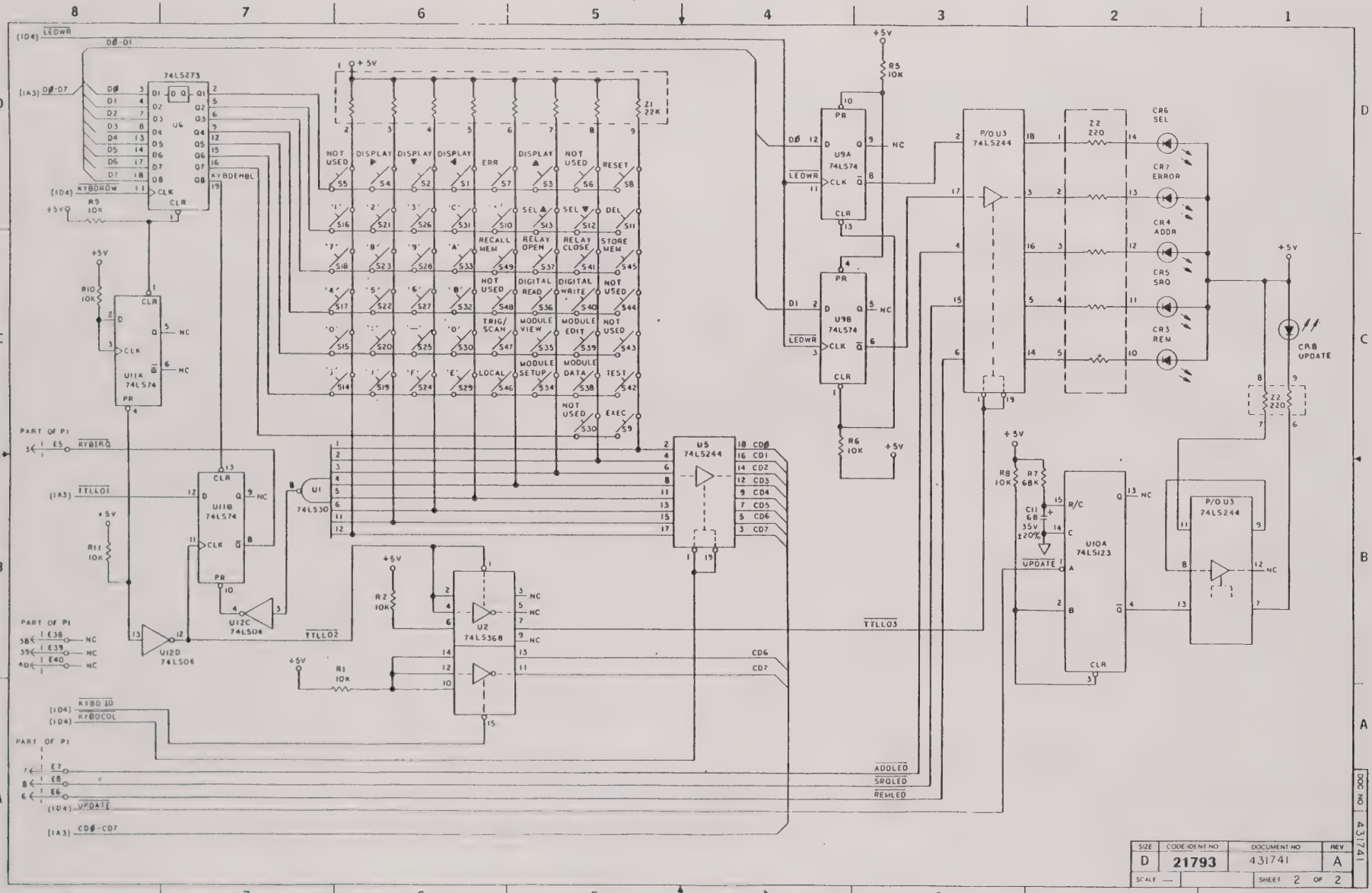
DOCUMENT TITLE

SCHEM, KEYBRD DSPLY

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431741	A

SCALE — SHEET 1 OF 2

DOC. NO 431741



SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	431741	A
SCALE —		SHEET 2 OF 2	

DOC NO 431741

SECTION 7 CHASSIS PARTS LIST

404361	Chassis Assembly	7-2
401744	PCB Assy., Interconnection	7-3
401743	PCB Assy., Computer	7-4
404362	Power Supply Assembly	7-7
401742	PCB Assy., Power Supply	7-9
401758	PCB Assy., Analog Bus	7-11

Manufacturers are identified by FSC numbers listed in the table on page 7-12, "List of Suppliers". The code numbers are from the Federal Supply Code for Manufacturers Cataloging Handbook H4-1, H4-2, and their supplements.

404361 - CHASSIS ASSEMBLY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401744	PCB ASSY., INTERCONNECT	21793	401744
2	401758	PCB ASSY., ANALOG BUS	21793	401758
3	404362	POWER SUPPLY ASSY.	21793	404362
4	454830	FRONT PANEL	21793	454830
5	454833	CORNER POST, RH	21793	454833
6	454834	CORNER POST, LH	21793	454834
7	454835	PANEL, CENTER SUPPORT	21793	454835
8	454836	PLATE, CARD GUIDE	21793	454836
9	401743	PCB ASSY., COMPUTER	21793	401743
10	454845	CHASSIS RAIL (2 REQ'D)	21793	454845
12	454851	EXTRUSION, RACK FLANGE, 5.25 LG (2 REQ'D)	21793	454851
13	454852	OVERLAY, FRONT PANEL	21793	454852
15	454872	TRIM, SIDE PANEL (2 REQ'D)	21793	454872
16	454873	EXTRUSION, SIDE PANEL (2 REQ'D)	21793	454873
17	454874	TRIM, SIDE PANEL (2 REQ'D)	21793	454874
18	454875	COVER, TOP	21793	454875
19	454876	COVER, BOTTOM	21793	454876
20	454877	HANDLE, 5.25 (2 REQ'D)	21793	454877
21	601246	SWITCH, ROCKER, SPDT	SEE NOTE 1 TABLE 6.1	1801-1143
23	610887	SCREW, PFH, 6-32 X .375 (21 REQ'D)	08226	507C632R6
24	610890	SCREW, TAPTITE, THREAD FORMING, 6-32 X .375 (2 REQ'D)	78189	---
25	610909	SCREW, PPH, 6-32 X .500 (6 REQ'D)	78189	---
27	610925	SCREW, PPH, 6-32 X 1.00 (6 REQ'D)	78189	---
29	611062	FOOT, BUTTON, FAST (4 REQ'D)	06915	FF-004
30	611064	CARD GUIDE, 9.6 LG (12 REQ'D)	23880	1962F
31	615074	SCREW, PPH, 8-32 X .375 (4 REQ'D)	---	---
33	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	
34	615046	SCREW, PPH, 4-40 X .500 (2 REQ'D)	---	---
35	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---
36	920962	LOCTITE, 242, MED STR	05972	242
37	921043	PLUG, RUBBER (4 REQ'D)	17377	6023-007
41	615076	SCREW, PPH, 8-32 X .500 (4 REQ'D)	---	---
42	615057	SCREW, PPH, 6-32 X .250 (2 REQ'D)	---	---
45	920888	LABEL, IDENTIFICATION	21793	920888

401744 - PCB ASSY., INTERCONNECT

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR2	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR3	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR4	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR5	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
J1	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J2	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J3	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J4	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J5	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J6	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J7	601229	CONNECTOR, PLUG, 37 PIN	00779	745189-7
J8	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
Q1	200200	TRANSISTOR, NPN	21793	200200
Q2	200200	TRANSISTOR, NPN	21793	200200
U1	230767	IC, REGULATOR, 5V	27014	LM78L05AC
Z1	080022	RES NETWORK, CERMET, 220 OHM, 14P7R, 2%	11236	760-3-R220
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
9	411744	PCB, INTERCONNECT (UNLOADED)	21793	411744
12	600786	POST, MACHINE APPLIED STRIP (7 REQ'D: TP1-TP7)	00779	1-87022-0
16	610777	CABLE TIE	53421	T18R
17	611045	STANDOFF, SWAGE, .187 X .500 LG (2 REQ'D)	51506	41086-R-A-105-22
18	601238	TERMINAL, CRIMP, SPADE, 16-22 GA (2 REQ'D)	00779	2-520337-2
19	630014	CONNECTOR, RETAINER KIT, FEMALE SCREWLOCK	00779	205817-1
20	501376	TUBING, TEFLON, .036 ID, CLR	29005	TW20GA
21	523444	WIRE, TEFLON, STRANDED, 22G, YEL	---	---
22	523888	WIRE, TEFLON, STRANDED, 22G, GRAY	---	---
24	920962	LOCTITE, 242, MED. STR.	05972	242

401743 - PCB ASSY., COMPUTER

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110143	CAP, TANTA, 1 MFD, 35V, 20%	05397	T368A105M035AS
C2-20	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C21	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C22	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C23-30	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C24	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C31	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C32	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C33	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	211083	DIODE, SILICO	81349	1N916B
CR2	211083	DIODE, SILICO	81349	1N916B
J2	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
J200	600567	CONNECTOR, RECEPTACLE	02660	31-236
J201	600567	CONNECTOR, RECEPTACLE	02660	31-236
J203	601253	CONNECTOR, GPIB, 24 PIN	00779	553811-3
Q1	200295	TRANSISTOR, N-CHAN, MOS FET	17856	VN10KM
Q2	200298	TRANSISTOR, NPN	04713	2N3904
R1	000101	RES, CARBON, 100 OHM, 1/4W, 5%	81349	RC07GF101J
R2	010985	RES, METAL, 6.04K, 1/8W, 1%	81349	RN55C6041F
R3	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R4	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R5	010873	RES, METAL, 2.21K, 1/8W, 1%	81349	RN55C2211F
R6	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R7	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R8	010924	RES, METAL, 1.24K, 1/8W, 1%	81349	RN55C1241F
R9	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
R10	000201	RES, CARBON, 200 OHM, 1/4W, 5%	81349	RC07GF201J
S201	601278	SWITCH, DIP, RT. ANGLE, 6P	09353	BD06-AV
U1	230547	IC, QUAD COMPARATOR	27014	LM311N
U2	230547	IC, QUAD COMPARATOR	27014	LM311N
U3	230742	IC, DIGITAL, PRIORITY ENCODER	04713	SN7545KN
U4	230577	IC, OCTAL BUFFER	27014	74LS244

401743 - PCB ASSY., COMPUTER (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U5	230357	IC, DIGITAL, DUAL	27014	74LS73N
U6	230336	IC, HEX SCHMITT TRIGGER	01295	74LS14
U7	230780	IC, DIGITAL	04713	MC6840P
U9	230740	IC, MEMORY, RAM, 8K, 150 NS	52531	HM6264P-15
U11	230841	IC, EPROM	21793	230841
U12	230760	IC, DIGITAL, QUAD	27014	MM74HC37
U13	230719	IC, FAST NAND	07263	74F00
U14	230550	IC, OCTAL LATCH	27014	74LS374N
U15	230550	IC, OCTAL LATCH	27014	74LS374N
U16	230459	IC, OCTAL GPIB TRANS	01295	SN75160
U17	230793	IC, DIGITAL, GPIB CONTROLLER	01295	TMS9914ANL
U18	230782	IC, DIGITAL	07263	74F139PC
U19	230710	IC, DIGITAL, DECODER	07263	74F138
U20	230577	IC, OCTAL BUFFER	27014	74LS244
U21	230386	IC, 8-BIT REGISTER	27014	74LS273
U22	230779	IC, LINE DRIVER, QUAD 3-STATE OUTPUTS	04713	AM26LS31P
U23	230472	IC, OCTAL GPIB TRANS	01295	SN75161
U24	230758	IC, MEMORY, NON VOL	61394	DQ2816A-350
U26	230740	IC, MEMORY, RAM, 8K, ISONS	52531	HM6264P-15
U28	230842	IC, EPROM	21793	230842
U29	230744	IC, MICRO, 68000, 8 MHZ	04713	MC68000G8
U30	230428	IC, QUAD 2 INPUT OR GATE	27014	DM74LS32N
U31	230705	IC, DIGITAL	04713	74F04
U32	230550	IC, OCTAL LATCH	27014	74LS374N
U33	230577	IC, OCTAL BUFFER	27014	74LS244
U34	230779	IC, LINE DRIVER, QUAD 3-STATE OUTPUTS	04713	AM26LS31P
VR1	230551	IC, VOLTAGE REFERENCE	24355	AD589JH
Y1	921005	OSC, CLOCK, 8 MHZ, .01%	04713	RASCO-3
Z1	080077	RES NETWORK, 220K, 1.1W, 2%	11236	750-83-R220K
Z2	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z3	080076	RES NETWORK, 10K, .9W, 2%	11236	750-63-R10K
Z4	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z5	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z6,7	080020	RES NETWORK, CERMET, 10K, 8P7R, 2%	11236	750-81-R10K

401743 - PCB ASSY., COMPUTER (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
Z8	080037	RES NETWORK, CERMET, 220 OHM, .9W, 6P5R, 2%	11236	750-61-R220
Z9	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
59	411743	PCB, COMPUTER (UNLOADED)	21793	411743
61	454815	PLATE, BUTCH, COMPUTER	21793	454815
63	600823	SOCKET, DUAL IN-LINE, 40-P	52072	CA40S-TS0-BC
64	600894	LUG, SOLDER (2 REQ'D)	86928	5413-20
66	600786	POST, MACHINE APPLIED STRIP (13 REQ'D: TP1-10, E1-3)	00779	1-87022-0
67	601199	SOCKET, 64P, LOW PROFILE	06776	ICA-649-S-TG
72	611053	TERMINAL, CRIMP (3 REQ'D)	00779	530553-2
73	920891	SOCKET, 28 PIN, SOLDER TAIL (10 REQ'D)	52072	CA-28S-TSD
77	630010	KIT, HARDWARE, STANDOFF, STUD MOUNT	00779	552633-3
78	616252	SCREW, PPH, SEMS ASSY., 4-40 X .312 (2 REQ'D)	78189	---
80	500009	TUBING, SHRINK, .120 ID, BLK	29005	RNF-100-1-1/8
81	500143	TUBING, SHRINK, .062 ID, BLK	29005	RNF-100-1-1/16
82	500159	SLEEVING, PVC, .118 ID	92194	PVC-9
84	500132	WIRE, TEFLON, STRANDED, TWISTED PR, 24 GA BLK/WHT	---	---
85	524555	WIRE, TEFLON, STRANDED, 24 GA, GRN	---	---

404362 - POWER SUPPLY ASSEMBLY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
B200	920982	FAN, BOXER, 34 CFM	28875	3115
J200	601219	CONNECTOR, PWR, EMI FILTER	05245	6J4
S200	601112	SWITCH, ROCKER, DPST	SEE NOTE 1 TABLE 6.1	1855.1102
T1	300105	TRANSFORMER, POWER, +5V, +13V	55167	2968
4	401742	PCB ASSY., POWER SUPPLY	21793	401742
7	454592	BOOT-CONN. INSULATOR	21793	454592
8	454829	CHASSIS, POWER SUPPLY	21793	454829
9	454881	PLATE, REAR	21793	454881
10	454994	BRACKET, POWER SUPPLY	21793	454994
12	500009	TUBING, SHRINK, .125 ID, BLK	29005	RNF-100-1-1/8
13	500025	WIRE, TEFLON, STRANDED, 20G, BLK	---	---
14	500116	WIRE, TEFLON, STRANDED, 20G, RED	---	---
15	500117	WIRE, TEFLON, STRANDED, 20G, GRN	---	---
16	500118	WIRE, TEFLON, STRANDED, 20G, BLU	---	---
17	500119	WIRE, TEFLON, STRANDED, 20G, YEL	---	---
18	500132	WIRE, TEFLON, STRANDED, 18G, WHT	---	---
19	500215	WIRE, TEFLON, STRANDED, 18G, GRN/YEL	---	---
20	500229	WIRE, TEFLON, STRANDED, 20G, BRN	---	---
21	500230	WIRE, TEFLON, STRANDED, 20G, ORG	---	---
22	500233	WIRE, TEFLON, STRANDED, 20G, WHT	---	---
25	600745	TERMINAL, RECEPTACLE (4 REQ'D)	00779	60196-3

404362 - POWER SUPPLY ASSEMBLY (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
26	600022	LUG, SOLDER	83330	1416-6
27	601022	TERMINAL, RECEPTACLE (10 REQ'D)	00779	2-350800-2
30	610180	CLAMP, CABLE (2 REQ'D)	09922	HP3N-7/32
31	610777	CABLE TIE (2 REQ'D)	53421	T18R
32	611107	WASHER, SHOULDER, #8 X .437 (4 REQ'D)	86928	5607-19
33	611122	SPACER, 1.00 LG, .250 O.D. (4 REQ'D)	06540	9236-A171-16
34	611123	SCREW, PPH, 8-32 X 2.625 (4 REQ'D)	---	---
35	611124	SCREW, PPH, 10-32 X .750 (4 REQ'D)	---	---
36	615060	SCREW, PPH, 6-32 X .437 (2 REQ'D)	---	---
37	616255	SCREW, PPH, SEMS ASSY., 6-32 X .312 (4 REQ'D)	78189	---
38	920580	FUSE, SLO-BLO, 1.5A, 250V	71400	MDX1-1/2
39	920729	LABEL, WARNING	21793	920729
43	617005	NUT, HEX, 6-32 (3 REQ'D)	---	---
44	617006	NUT, HEX, 8-32	---	---
45	617103	WASHER, FLAT, #6, LIGHT SERIES (2 REQ'D)	---	---
47	617128	WASHER, LOCK, #6, LIGHT SERIES (2 REQ'D)	---	---

401742 - PCB ASSY., POWER SUPPLY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110214	CAP, AE, 10000 MFD, 16V	00853	380-103-P-16-J04
C2	110214	CAP, AE, 10000 MFD, 16V	00853	380-103-P-16-J04
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5RO-103K
C4	110217	CAP, AE, 1000 MFD, 35V, RADIAL	80031	347SKG102M035TMBS
C5	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C6	110222	CAP, ELECT, 1000 MFD, 16V, 20%	62643	SM16VB102M
C7	120355	CAP, MET. POLY, .033 MFD, 200V, 10%	56289	450P333X9250FD
C8	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
C9	110220	CAP, ELECT, 10000 MFD, 35V, +30%, -10%	90201	LP103S035E9P3
C10	120356	CAP, MET. POLY, .1 MFD, 100V, 10%	56289	450P104X9100FD
C11	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
C12	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
CR1	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR2	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR3	210004	DIODE, SILICO	81349	1N4004
CR4	210004	DIODE, SILICO	81349	1N4004
CR5	220019	DIODE, SILICO, ZENER	81349	1N752A
CR6	210004	DIODE, SILICO	81349	1N4004
CR7	210004	DIODE, SILICO	81349	1N4004
CR8	220004	DIODE, SILICO, ZENER	81349	1N961B
CR9	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR10	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR11	220098	DIODE, ZENER, 3.9V, 5%	04713	1N5990B
CR12	210004	DIODE, SILICO	81349	1N4004
CR13	210004	DIODE, SILICO	81349	1N4004
CR14	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR15	210107	DIODE, POWER, 6A, 50V	04713	MR750
J8	601241	CONNECTOR, RT. ANGLE, PLUG, 20 PIN	57856	PRE10-6101-15
Q1	200131	TRANSISTOR, SILICO, NPN	01295	TIP29
Q2	200278	TRANSISTOR, POWER, SCR	04713	2N6504
Q3	200187	TRANSISTOR, SILICO, NPN	81349	2N3055
Q4	200298	TRANSISTOR, NPN	04713	2N3904
Q5	200187	TRANSISTOR, SILICO, NPN	81349	2N3055
Q6	200233	TRANSISTOR, SILICO, NPN	04713	MPS-A42

401742 - PCB ASSY., POWER SUPPLY (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
Q7	200131	TRANSISTOR, SILICO, NPN	01295	TIP29
Q8	200167	TRANSISTOR, PNP	04713	MPSU55
R1	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R2	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R3	012127	RES, METAL, 1.74K, 1/8W, 1%	81349	RN55C1741F
R4	000272	RES, CARBON, 2.7K, 1/4W, 5%	81349	RC07GF272J
R5	012126	RES, METAL, 4.75K, 1/8W, 1%	81349	RN55C4751F
R6	000220	RES, CARBON, 22 OHM, 1/4W, 5%	81349	RC07GF220J
R7	001781	RES, CARBON, 6.2 OHM, 1/4W, 5%	81349	RC07GF6R2J
R8	000681	RES, CARBON, 680 OHM, 1/4W, 5%	81349	RC07GF681J
R9	000223	RES, CARBON, 22K, 1/4W, 5%	81349	RC07GF223J
R10	000202	RES, CARBON, 2K, 1/4W, 5%	81349	RC07GF202J
R11	001721	RES, CARBON, 2.2 OHM, 1/2W, 5%	81349	RC20GF2R2J
R12	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R13	000223	RES, CARBON, 22K, 1/4W, 5%	81349	RC07GF223J
R14	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R15	000100	RES, CARBON, 10 OHM, 1/4W, 5%	81349	RC07GF100J
R16	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R17	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R18	000201	RES, CARBON, 200 OHM, 1/4W, 5%	81349	RC07GF201J
R19	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
R20	001705	RES, CARBON, 820 OHM, 1/2W, 5%	81349	RC20GF821J
R21	010965	RES, METAL, 1.21K, 1/8W, 1%	81349	RN55C1211F
R22	010872	RES, METAL, 1.54K, 1/8W, 1%	81349	RN55C1541F
R23	000622	RES, CARBON, 6.2K, 1/4W, 5%	81349	RC07GF622J
R24	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R25	040320	POT, CERMET, 500 OHM, SIDE ADJ, 10%	73138	72XWR500
U1	230784	IC, LINEAR, VOLTAGE REGULATOR	04713	MC1723CP
U2	230547	IC, QUAD COMPARATOR	27014	LM339N
U3	310176	RELAY, SOLID STATE, 140 VAC, 1 AMP	59993	DP1110
U4	230784	IC, LINEAR, VOLTAGE REGULATOR	04713	MC1723CP
Z1	080040	RES NETWORK, CERMET, 22K, 1.1W, 8P4R, 2%	11236	750-83-R22K
63	411742	PCB, POWER SUPPLY (UNLOADED)	21793	411742

401742 - PCB ASSY., POWER SUPPLY (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
66	600786	POST, MACHINE APPLIED STRIP (6 REQ'D: TP1-4, ENDS OF R3)	00779	1-87022-0
67	600977	TAB, DISCONNECT (9 REQ'D: E1-9)	79963	895
68	601013	HEATSINK, INSULATOR, 7-MIL, PLASTIC (2 REQ'D)	55285	3223-07FR-05
71	601267	HEATSINK, DUAL	30161	5786B
72	601309	CONNECTOR, DIP, LOW PROFILE, 14-PIN (2 REQ'D)	91506	214-AG39D
73	601439	CONNECTOR, PCB, RECEPTACLE (4 REQ'D)	06776	NS-441-B1
77	610642	SCREW, NYLON, BINDER HD, 4-40 X .250 BLK (2 REQ'D)	95987	N-440 X 1/4
78	610851	WASHER, INSULATING, TIP-32 STYLE (2 REQ'D)	18565	60-11-5791-1674
80	611076	NUT, INSULATING, 6-32 (2 REQ'D)	78189	8956-06-01
83	615061	SCREW, PPH, 6-32 X .500 (4 REQ'D)	---	---
84	617016	NUT, HEX, 4-40 (2 REQ'D)	---	--
85	617077	WASHER, INTERNAL LOCK, #4 (2 REQ'D)	---	---
86	617103	WASHER, FLAT, LIGHT SERIES, #6 (2 REQ'D)	---	---
88	617128	WASHER, LOCK, LIGHT SERIES, #6 (2 REQ'D)	---	---
91	910632	HEATSINK, TO - T3, MODIFIED	21793	910632

401758 - PCB ASSY., ANALOG BUS

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
J1	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J2	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J3	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J4	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J5	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
1	411758	PCB, ANALOG BUS (UNLOADED)	21793	411758

List of Suppliers

FSC	Name
00779	Amp, Inc. Harrisburg, PA
00853	Sangamo Electric Co. Pickens, SC
01295	Texas Instruments, Inc. Dallas, TX
02660	Amphenol Corp. Broadview, IL
02735	RCA (Solid State Div.) Somerville, NJ
03296	Nylon Moulding Temple City, CA
03508	General Electric Co. (Semi-Conductor Products Div.) Electronics Park, Syracuse, NY
04713	Motorola, Inc. (Semi-Conductor Products Div.) Phoenix, AZ
04963	3M Company St. Paul, MN
05245	Corcom, Inc. Chicago, IL
05276	Pomona Electronics Co., Inc. Pomona, CA
05397	Union Carbide Corp. (Materials Systems Div.) Cleveland, OH
05693	Cherry Commercial Fasteners Division of Textron, Inc. Santa Ana, CA
05972	Loctite Corp. Hartford, CT
06383	Panduit Corp. Tinley Park, IL

FSC	Name
06540	Amatom Electronic Hardware New Rochelle, NY
06776	Robinson Nugent Inc. New Albany, IN
06915	Richo Plastics Co. Chicago, IL
07263	Fairchild (Semi-Conductor Products Div.) Mountain View, CA
08226	Reliable Industries Southgate, CA
08261	Spectra-Strip Corp. Garden Grove, CA
09353	C & K Components Watertown, MA
09922	Burndy Corp. Norwalk, CT
11236	CTS of Berne, Inc. Berne, IN
12856	Micrometals City of Industry, CA
13103	Thermalloy, Inc. Dallas, TX
16059	Devcon Corp. Danvers, MA
17377	Accurate Products Hillside, NJ
17856	Siliconix, Inc. Santa Clara, CA
18324	Signetics Corp. Sunnyvale, CA
18565	Chromerics, Inc. Woburn, MA

FSC	Name
18677	Scanbe Manufacturing Co. El Monte, CA
19738	Avdel-Chobert Telesboro, NJ
21793	Racal-Dana Instruments Inc. Irvine, CA
23880	Stanford Applied Engineering Santa Clara, CA
24355	Analog Devices Norwood, MA
24931	Specialty Connector Co., Inc. Greenwood, IL
25088	Siemens Corp. (Comp. Group) Iselin, NJ
27014	National Semi-Conductor Corp. Santa Clara, CA
27264	Molex Products Co. Downers Grove, IL
28198	Positronic Industries, Inc. Springfield, MO
28875	IMC Magnetics Corp. Rochester, NH
29005	Storm Products Co. Los Angeles, CA
30161	Aavid Engineering Inc. Laconia, NH
34355	Advance Micro Devices Sunnyvale, CA
34359	Three (3) M Co. (Commercial Tape Division) St. Paul, MN
34785	Dek-Inc. St. Charles, IL

FSC	Name
46384	Penn Engineering & Manufacturing Co. Doylestown, PA
50434	Hewlett-Packard Co. (HPA Div.) Palo Alto, CA
50667	Dynatech/UZ Venice, CA
51506	Accurate Screw Machine Co. Nutley, NJ
51642	Centre Engineering Inc. State College, PA
52072	Circuit Assy. Corp. Costa Mesa, CA
52210	Getting Engr. & Mfg. Co. Spring Mills, PA
52531	Hitachi Magnetics Corp. Edmore, MI
53421	Tyton Corp. Milwaukee, WI
55167	Corona Magnetics Corona, CA
55210	Gettig Engrg & Mfg Co, Inc. Spring Mills, PA
55285	Bergquist Co., Inc. Minneapolis, MN
55322	Samtee, Inc. New Albany, IN
56289	Sprague Electric Co. (Pacific Div.) Los Angeles, CA
57856	Kel-Am Inc. Eldon, MO
58730	Thomas & Betts Co. Elizabeth, NJ

FSC	Name
58982	Precision Connector Designs Winchester, MA
59311	Communication Instruments El Segundo, CA
60975	Power-one Linear Products Camarillo, CA
61394	Seeq Technology San Jose, CA
61529	Aromat Corp. Cupertino, CA
61935	Schurter, Inc. Petaluma, CA
62643	United Chemicon Rosemont, IL
6T698	Plastiglide Manufacturing Corp. Hawthorne, CA
70903	Belden Corp. Chicago, IL
71279	Cambion Cambridge, MA
71400	Bussman Manufacturing (Division of McGraw & Edison Co.) St Louis, MO
71471	Aerovox Corp. Moneks Corner, SC
71707	Coto-Coil Co., Inc. Providence, RI
71785	TRW Electronic Components (Cinch Division) Elk Grove Village, IL
72982	Erie Technological Products, Inc. Erie, PA
73138	Beckman Instruments, Inc. Fullerton, CA

FSC	Name
73631	Curtis Industries Milwaukee, WI
75915	Littelfuse, Inc. Des Plaines, IL
76493	J.W. Miller Co. Compton, CA
78189	Illinois Tool Works, Inc. (Shakeproof Div.) Elgin, IL
79963	Zierick Mfg. Corp. New Rochelle, NY
80031	Mepco-Electra Morristown, NJ
81349	Military Specification
83330	Herman H. Smith, Inc. Brooklyn, NY
86928	Seastrom Mfg. Co. Glendale, CA
8Z390	Kurt Manufacturing Inc. Oceanside, CA
90201	Mallory Capacitor, Co. Indianapolis, IN
91506	Augat, Inc. Attleboro, MA
91637	Dale Electronics Inc. Columbus, NE
92194	Alpha Wire Elizabeth, NJ
95275	Vitramon, Inc. Bridgeport, CT
95987	Weckesser Co, Inc. Chicago, IL

FSC	Name
98291	Sealectro Corp. Mamaroneck, NY
99800	American Precision Industries Inc. (Delevan Division) East Aurora, NY
NOTE 1	Universal Components Co. Los Angeles, CA
NOTE 2	RLC Electronics Mt. Kisko, NY
NOTE 3	Worldnet Marketing Inc. Costa Mesa, CA

SECTION 8 MODULE PARTS LIST

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Manufacturers are identified by FSC numbers listed in the table on page 7-12, "List of Suppliers". The code numbers are from the Federal Supply Code for Manufacturers Cataloging Handbook H4-1, H4-2, and their supplements.

404447 - OPTION 10, BREADBOARD ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401754	PCB ASSY., BREADBOARD	21793	401754
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401754 - PCB ASSY., BREADBOARD (OPTION 10)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
CR1,2	210071	LAMP, HIGH EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR3	220089	DIODE, ZENER	12969	TVS505
F1,2	920488	FUSE, 2A, 250V	75915	312.002
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20 PIN	57856	PRE10-6101-15
R1	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R2	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230386	IC, 8-BIT REGISTER	27014	74LS273
U8	230577	IC, OCTAL BUFFER	27014	74LS244
U10	230386	IC, 8-BIT REGISTER	27014	74LS273
U11	230577	IC, OCTAL BUFFER	27014	74LS244
U13	230386	IC, 8-BIT REGISTER	27014	74LS273
U14	230577	IC, OCTAL BUFFER	27014	74LS244
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
26	411754	PCB, BREADBOARD (UNLOADED)	21793	411754
29	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
45	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

404448 - OPTION 12, ACTUATOR ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401753	PCB ASSY., ACTUATOR	21793	401753
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401753 - PCB ASSY., ACTUATOR (OPTION 12)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-10	310170	RELAY, 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20 PIN	57856	PRE10-6101-15
R1-20	600245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
28	411753	PCB, ACTUATOR (UNLOADED)	21793	411753
31	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
45	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

404455 - OPTION L12, ACTUATOR

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401793	PCB ASSY., ACTUATOR	21793	401793
4	404388	QD ASSY., TERMINAL	21793	404388

404388 - QD ASSY., TERMINAL

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
5	454837	BRACKET, QD TERMINAL BLOCK	21793	454837
6	454849	PLATE, QD TERMINAL BLOCK	21793	454849
7	454999	BRACKET, INTERLOCK	21793	454999
9	454857	STRAIN RELIEF, SPONGE (2 REQ'D)	21793	454857
10	454860	SPRING, RETAINING, SINGLE (2 REQ'D)	21793	454860
12	601242	CONNECTOR, RECEPTICAL, EDGE/CABLE (2 REQ'D)	58982	PCD-1-B-22
13	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
14	615050	SCREW, PPH, 4-40 X 1.00 (4 REQ'D)	---	---
15	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (3 REQ'D)	78189	---
16	920962	LOCTITE, 242, MED. STR.	05972	242
17	921041	LABEL SET, 1250 (2 REQ'D)	21793	921041

401793 - PCB ASSY., ACTUATOR (OPTION L12)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-10	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-20	6000245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411793	PCB, ACTUATOR LATCH (UNLOADED)	21793	411793
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
48	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

401748 - PCB ASSY., DIGITAL I/O (OPTION 14)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3,4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C6-12	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C13	100117	CAP, CERAM, 470 PFD, 1000V, 20%	56289	C023B102E471M
C14-28	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
CR1-22	211083	DIODE, SILICO	81349	1N916B
CR23-38	220103	DIODE, ZENER	04713	1N977B
F1-16	921045	FUSE, 1/4A, 125V, SUB MIN.	75915	255.250
L1	310056	CHOKE, RF, .68 UH	76493	9230-16
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601191	CONNECTOR, PCB, 40P, RIGHT ANGLE	23880	RP6240D2RLSF
Q1	200298	TRANSISTOR, NPN	04713	2N3904
Q2-17	200271	TRANSISTOR, FET, POWER	17856	VN10KM
R1	000332	RES, CARBON, 3.3K, 1/4W, 5%	81349	RC07GF332J
R2-4	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R5-12	000472	RES, CARBON, 4.7K, 1/4W, 5%	81349	RC07GF472J
R13	010894	RES, METAL, 20K, 1/8W, 1%	81349	RN55C2002F
R14,15	010676	RES, METAL, 15K, 1/8W, 1%	81349	RN55C1502F
R16	010894	RES, CARBON, 20K, 1/8W, 1%	81349	RN55C2002F
R17-24	000472	RES, CARBON, 4.7K, 1/4W, 5%	81349	RC07GF472J
R25-40	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R41-43	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R44	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
U1	230547	IC, QUAD COMPARATOR	27014	LM339N
U2	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230768	IC, DIGITAL	04713	SN74LS139N
U5	230368	IC, DEMULTIPLEXER	27014	74LS138
U6	230637	IC, DIGITAL BUFFER	18324	N74LS244
U7	230825	IC, OCTAL LATCH	02735	74HCT273

401748 - PCB ASSY., DIGITAL I/O (OPTION 14) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U8	230796	IC, QUAD 2-INPUT NAND GATE	02735	74HCT00E
U9	230825	IC, OCTAL LATCH	02735	74HCT273
U10	230798	IC, DUAL D W/SET & RESET	02735	74HCT74E
U11	230414	IC, QUAD EXCLUSIVE OR GATE	27014	74LS86
U12	230843	IC, DIGITAL, BUFFER, 3-STATE OCTAL INV.	04713	MC74HCT240N
U13	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U14	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U15	230843	IC, DIGITAL, BUFFER, 3-STATE OCTAL INV.	04713	MC74HCT240N
U16	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U17	230806	IC, OCTAL TRANSPARENT LATCH, 3-STATE OUTPUT	02735	74HCT373E
U18	230802	IC, OCTAL D TYPE F-F, 3-STATE	02735	74HCT374
U19	230547	IC, QUAD COMPARATOR	27014	LM339N
U20	230547	IC, QUAD COMPARATOR	27014	LM339N
U21	230547	IC, QUAD COMPARATOR	27014	LM339N
U22	230547	IC, QUAD COMPARATOR	27014	LM339N
Z1	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z4	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z5	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z6	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
51	600786	POST, MACHINE APPLIED STRIP (4 REQ'D: TP1-4)	00779	1-87022-0
53	411748	PCB, DIGITAL I/O (UNLOADED)	21793	411748
54	454840	PLATE, DIGITAL INTERFACE	21793	454840
55	454996	SHIELD, UW MODULE	21793	454996
60	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
62	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---

404446 - OPTION 15, RELAY DRIVER ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401759	PCB ASSY., RELAY DRIVER	21793	401759
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401759 - PCB ASSY., RELAY DRIVER (OPTION 15)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
F1	920488	FUSE, 2A, 250V	75915	312.002
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z10-12	080009	RES NETWORK, CERMET, 6.8K, 16P8R, 2%	11236	761-3-R6.8K

401759 - PCB ASSY., RELAY DRIVER (OPTION 15) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
26	411759	PCB, RELAY DRIVER (UNLOADED)	21793	411759
30	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
44	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
46	921023	CLIP, FUSE (2 REQ'D)	61935	0G751.0099
47	920735	SOCKET, IC, 16P (6 REQ'D)	71785	133-51-02-006

401889 - PCB ASSY., 1250-16

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-11	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
J1-5	601725	CONNECTOR, D-SUB, RECEPT, 15 PIN	00779	745782-4
K1-18	310188	RELAY, POLAR, 4A. AMBER	61529	S4EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	600786	POST, TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1-85	600245	JUMPER, INSULATED	52210	L-2007-1
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(28)	411889	PCB, 1250-16 (UNLOADED)	21793	411889
(31)	454996	SHIELD, UV MODULE	21793	454996
(33)	455345	PLATE, SIGNAL INTERFACE	21793	455345
(41)	611092	HARDWARE KIT, D-SUB, 4-40F	00779	205817-3
(43)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (8 REQ'D)	78189	-
(46)	920962	LOCTITE, 242, MED STR	05972	272

404445 - OPTION 20, POWER MODULE ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401757	PCB ASSY., POWER MODULE	21793	401757
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401757 - PCB ASSY., POWER MODULE (OPTION 20)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
F1	920488	FUSE, 2A, 250V	75915	312.002
K1-10	310167	RELAY, POWER, 2 FORM C	61529	ST2E-DC12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
28	411757	PCB, POWER MODULE (UNLOADED)	21793	411757
32	454855	SHIELD, MODULE, TOP	21793	454855
35	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
41	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
44	921023	CLIP, FUSE (2 REQ'D)	61935	0G751.0099

404444 - OPTION 30, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755	PCB ASSY., SCANNER/MUX	21793	401755
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

404612 - OPTION 30C, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755-001	PCB ASSY., SCANNER/MUX	21793	401755-001
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

404613 - OPTION 30D, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755-002	PCB ASSY., SCANNER/MUX	21793	401755-002
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401755 - PCB ASSY., SCANNER/MUX (OPTION 30)(-001 OPTION 30C) (-002 OPTION 30D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-21	310170	RELAY, ELECTRO MECHANICAL 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-11	600245	JUMPER, INSULATED	55210	L-2007-1LP
R12*	600245	JUMPER, INSULATED	55210	L-2007-1LP
R13-43	600245	JUMPER, INSULATED	55210	L-2007-1LP
R44*	600245	JUMPER, INSULATED	55210	L-2007-1LP
R45	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

*NOT USED ON -002

401755 -PCB ASSY., SCANNER/MUX (OPTION 30) (-001 OPTION 30C) (-002 OPTION 30D) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSUALTED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
28	411755**	PCB, SCANNER/MUX (UNLOADED)	21793	411755**
30	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
45	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

** FOR -001 USE P/N 411755-001
FOR -002 USE P/N 411755-002

404456 - OPTION L30, SCANNER/MUX LATCH

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401792	PCB ASSY., SCAN/MUX	21793	401792
4	404388	QD ASSY., TERMINAL	21793	404388

401792 - PCB ASSY., SCANNER/MUX LATCH (OPTION L30)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-21	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-44	600245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7,8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10,11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13,14	230825	IC, OCTAL LATCH	02735	74HCT273
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U35	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411792	PCB, SCANNER/MUX LATCH (UNLOADED)	21793	411792
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250	78189	---
48	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

404707 - OPT. ASSY., 1250-30B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401900	PCB ASSY., SCANNER/MUX	21793	401900
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

404900 - PCB ASSY., 1250-30B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
K1-21	310170	RELAY, ELECTRO MECH, 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
R1-44	600245	JUMPER, INSULATED	52210	L-2007-1
R45	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
R56	600245	JUMPER, INSULATED	52210	L-2007-1
R62-63	600245	JUMPER, INSULATED	52210	L-2007-1
R69	600245	JUMPER, INSULATED	55210	L-2007-1
TP1-3	600786	POST, TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

401900 - PCB ASSY., 1250-30B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(28)	411900	PCB, 1250-30B (UNLOADED)	21793	411900
(30)	454855	SHIELD, MODULE, TOP	21793	454855
(45)	610252	STANDOFF, SWAGE, 1/4D, 4-40X.125	06540	9531B-B-0440-3A
(46)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (5 REQ'D)	78189	-

401961 - PCB ASSY., 1250-35

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-18	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
J1	601856-050	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL50F0T0LB
J2	601856-020	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL20F0T0LB
J3	601856-050	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL50F0T0LB
K1-53	310208	RELAY, 2 FORM C, 2P2T, 12V	61529	TQ2E-12V
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
P2	601241	CONNECTOR, RT, ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U16	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U17	231091	IC, OCTAL BUFFER	18324	74HC240D
U18	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U19	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U20	231091	IC, OCTAL BUFFER	18324	74HC240D
U21	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U22	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U23	231091	IC, OCTAL BUFFER	18324	74HC240D

401961 - PCB ASSY., 1250-35

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U24	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U25	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U26	231091	IC, OCTAL BUFFER	18324	74HC240D
U27	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U28	231094	IC, DEMUX DECODER	18324	N74LS138D
W15-16	601208-016	CONNECTOR, PLUG, 3 PIN	21793	601208-016
Z1	080116	RES NETWORK, 16P8R, 10K	73138	628-AL-103J
Z2	080115	RES NETWORK, 16P8R, 1K	73138	628-AL-102J
Z3	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z11	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z12	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z13	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z14	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z16	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z17	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z18	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z19	080118	RES NETWORK, 16PR, 100K	73138	628-AL-104J
(23)	411961	PCB, 1250-35 (UNLOADED)	21793	411961
(26)	454996	SHIELD, UW MODULES	21793	454996
(27)	455649	PANEL, FRONT, 1250-35	21793	455649
(34)	601195	PLUG, JUMPER, LOW PROFILE (2 REQ'D)	00779	531220-2
(43)	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
(45)	615012	SCREW, PPH, 2-56X.125 (6 REQ'D)	-	-
(46)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (10 REQ'D)	78189	-
(47)	920962	LOCTITE, 242, MED STR.	05972	242

404443 - OPTION 40, MATRIX MODULE ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401756	PCB ASSY., MATRIX MODULE	21793	401756
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

401756 - PCB ASSY., MATRIX MODULE (OPTION 40)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-20	310170	RELAY, ELECTRO MECHANICAL 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N

401756 - PCB ASSY., MATRIX MODULE (OPTION 40) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
28	411756	PCB, SCANNER/MUX (UNLOADED)	21793	411756
30	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
45	610252	SCREW, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

404457 - OPTION L40, MATRIX LATCH

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401791	PCB ASSY., MATRIX LATCH	21793	401791
4	404388	QD ASSY., TERMINAL	21793	404388

401791 - PCB ASSY., MATRIX LATCH (OPTION L40)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-20	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411791	PCB, SCANNER/MUX LATCH (UNLOADED)	21793	411791
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 x .250 (5 REQ'D)	78189	---
48	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

404711 - OPT. ASSY., 1250-40B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401896	PCB ASSY., 1250-40B	21793	401896
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

401896 - PCB ASSY., 1250-40B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
K1-20	310188	RELAY, POLAR, 4A. AMBER	61529	S4EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(25)	411896	PCB, 1250-40B (UNLOADED)	21793	411896
(29)	454855	SHIELD, MODULE, TOP	21793	454855
(42)	610252	STANDOFF, SWAGE, 1/4D, 4-40X.125	06540	9531B-B-0440-3A
(43)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (5 REQ'D)	78189	-

404712 - OPT. ASSY., 1250-45

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401898	PCB ASSY., 1250-45	21793	401898
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

401898 - PCB ASSY., 1250-45

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-18	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
K1-52	310190	RELAY, ELECTROMECHANICAL, 2P2T, 12V	61529	DS2YE-S-DC12V
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
P2	601241	CONNECTOR, RT, ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U16	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U17	231091	IC, OCTAL BUFFER	18324	74HC240D
U18	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U19	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U20	231091	IC, OCTAL BUFFER	18324	74HC240D
U21	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U22	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U23	231091	IC, OCTAL BUFFER	18324	74HC240D

401898 - PCB ASSY., 1250-45

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U24	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U25	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U26	231091	IC, OCTAL BUFFER	18324	74HC240D
U27	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U28	231094	IC, DEMUX DECODER	18324	N74LS138D
Z1	080116	RES NETWORK, 16P8R, 10K	73138	628-AL-103J
Z2	080115	RES NETWORK, 16P8R, 1K	73138	628-AL-102J
Z3	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z11	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z12	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z13	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z14	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z16	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z17	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z18	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z19	080118	RES NETWORK, 16PR, 100K	73138	628-AL-104J
(23)	411898	PCB, 1250-45 (UNLOADED)	21793	411898
(26)	454855	SHIELD, MODULE, TOP	21793	454855
(33)	610252	STANDOFF, SWAGE, 1/4D, 4-40X.125	06540	95313B-B0440-3A
(35)	616252	SCREW, PPH, SEMS ASSY., 4-40X.312 (5 REQ'D)	78189	63-040545-25
(38)	500023	WIRE, BARE COPPER/TIN, 24 GA	21793	500023
(40)	500288-001	WIRE, WRAP, 28G	92194	1806-1

401745 - 200 MHZ, 4:1 (OPTION 50)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-21	601231	CONNECTOR, BNC, PC MOUNT	00779	227161-2
K1-22	310169	RELAY, REED 1 FORM A	71707	CR-7101-12-1110
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7 W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	55210	ULN-2803A

401745 - 200 MHZ, 4:1 (OPTION 50) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
27	411745	PCB, 200 MHZ (UNLOADED)	21793	411745
29	454854	SHIELD, RF MODULE	21793	454854
31	454870	PLATE, RF INTERFACE	21793	454870
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
40	610389	GROMMET, CATERPILLAR	03296	G51H-B
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X .250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR.	05972	242

401749 - 2/4:1 M X 500 MHZ (OPTION 51A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-10	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-10	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11A	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11B	310168	RELAY, RF, 2 FORM C	59311	12103J302
RV1	220102	VARISTOR, 56V, 1.7 W-S	03508	V562A2
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

401749 - 2/4:1 M X 500 MHZ (OPTION 51A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411749	PCB, 500 MHZ (UNLOADED)	21793	411749
32	454841-1	PLATE, RF INTERFACE	21793	454841-1
33	454997	SHIELD, UW MODULE	21793	454997
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X .250 (12 REQ'D)	78189	---
47	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---

404368 - 4/4:1 M X 500 MHZ (OPTION 51B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-21	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-10	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11A	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11B	310168	RELAY, RF, 2 FORM C	59311	12103J302
K12-22	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

404368 - 4/4:1 M X 500 MHZ (OPTION 51B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411749	PCB, 500 MHZ (UNLOADED)	21793	411749
32	454842-1	PLATE, RF INTERFACE	21793	454842-1
33	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
44	610389	GROMMET, CATERPILLAR	03296	G51H-B
46	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
47	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (8 REQ'D)	78189	---
48	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---

401750 - 2/4:1 TREE, 1 GHZ (OPTION 52A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-10	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-12	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

401750 - 2/4:1 TREE, 1 GHZ (OPTION 52A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411750	PCB, QUAD, 4:1 TREE, 1 GHZ (UNLOADED)	21793	411750
31	454841-2	PLATE, RF INTERFACE, 1 GHZ H	21793	454841-2
32	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X.250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR	05972	242

404369 - 4/4:1 TREE, 1 GHZ (OPTION 52B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-22	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-24	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

404369 - 4/4:1 TREE, 1 GHZ (OPTION 52B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	751-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411750	PCB, QUAD, 4:1 TREE, 1GHZ (UNLOADED)	21793	411750
31	454842-2	PLATE, RF INTERFACE, 1 GHZ F	21793	454842-2
32	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
44	610389	GROMMET, CATERPILLAR	03296	G51H-8
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR	05972	242

401790 - PCB ASSY., 4/4:1 TREE RF (OPTION L52B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-11	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C12	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C13	110125	CAP, TANTA, 2.2 MFD, 35V, 20%	05397	T368B225M035AS
J1-20	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-28	310180	RELAY, ELECTROMAGNETIC	61529	S2M-L2-12V-H10
L1	310132	CHOKE, RF, .47 UH, 10%	99800	1025-12
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
R1	010400	RES, METAL, 200 OHM, 1/8W, .1%	81349	RN55C2003B
R2	010921	RES, METAL, 825 OHM, 1/8W, 1%	81349	RN55C8250F
R3-6	000226	RES, CARBON, 22M, 1/4W, 5%	81349	RC07GF226J
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230825	IC, OCTAL LATCH	02735	74HCT273
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

401790 - PCB ASSY., 4/4:1 TREE RF (OPTION L52B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U16	230825	IC, OCTAL LATCH	02735	74HCT273
U17	230825	IC, OCTAL LATCH	02735	74HCT273
U18	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U19	230844	IC, LINEAR	27014	LM317T
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U35	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U38	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	751-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
40	411790	PCB, QUAD 4:1 TREE RF (UNLOADED)	21793	411790
44	454842	PLATE, RF INTERFACE	21793	454842
45	454997	SHIELD, UHF MODULE	21793	454997
48	600786	POST, MACHINE APPLIED STRIP (4 REQ'D: TP1-4)	00779	1-87022-0
56	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
57	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---
60	920962	LOCTITE, 242, MED. STR.	05972	242

404642 - PCB ASSY., 1250-54B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C11-59	R-21-1801	CAP, CHIP, 10NF	95275	VJ1206Y103MF
J1-20	601822	CONN., CPAX, RECEPT, 5P, 50 OHM BNC	24931	28JR428-1
J21-36	601787	CONNECTOR, COAXIAL, RECEPT	98291	51-053-000
K1-24	310168	RELAY, POLAR, 4A. AMBER	61529	S4EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W	03508	V56ZA2
TP1-3	600786	POST, TEST, .025 SQ	00779	6-87022-6
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

404642 - PCB ASSY., 1250-54B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1-2	600245	JUMPER, INSULATED	52210	L-2007-1
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(32)	410792	PCB, 1250-54B (UNLOADED)	21793	410792
(35)	455322-001	PLATE RF, BNC	21793	455322-001
(36)	455330	SHIELD, RF	21793	455330
(48)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (10 REQ'D)	78189	-

401895 - PCB ASSY., 1250-55

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-66	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
K1-28	310194	RELAY, HIGH FREQUENCY 75 OHM	61529	RGIE-12V
J1-20	601821	CONNECTOR, COAXIAL, BNC, 50 OHM	24931	28JR-427-1
J21-36	601781	CONNECTOR, COAXIAL, RECEPT, 75 OHM	98291	51-153-0000
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
RV1	220102	VARISTOR, 56V. 1.7 W/S	03508	V56ZA2
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D

401895 - PCB ASSY., 1250-55

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
Z1	080116	RES NETWORK, 16P8R, 10K	73138	628-AL-103J
Z2	080115	RES NETWORK, 16P8R, 1K	73138	628-AL-102J
Z3	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
(25)	411895	PCB, 1250-55 (UNLOADED)	21793	411895
(28)	455322-001	PLATE, RF, BNC	21793	455322-001
(38)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (3 REQ'D)	78189	-
(39)	920962	LOCTITE, 242, MED STR	05972	242

401751 - PCB ASSY., 18 GHZ X 2 MODULE (OPTION 60A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K2	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K3	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N

401751 - PCB ASSY., 18 GHZ X 2 MODULE (OPTION 60A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454848-060	PLATE, UWAVE INTERFACE	21793	454848-060
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (4 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (4 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (4 REQ'D)	---	---

404370 - PCB ASSY., 18 GHZ X 4 MODULE (OPTION 608)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K1	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K2	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K3	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K4	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244

404370 - PCB ASSY., 18 GHZ X 4 MODULE (OPTION 60B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454839-1	PLATE, UWAVE INTERFACE	21793	454839-1
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (8 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (8 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (8 REQ'D)	---	---
45	601236	TERMINAL, CRIMP, SNAP-IN, 22-30 GUAGE (2 REQ'D)	27264	08-55-0110
46	601245	CONNECTOR, HOUSING, 2 POS RECEPTACLE	27264	22-01-2026

404371 - PCB ASSY., 26 GHZ X 2 MODULE (OPTION 61A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K2	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K3	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN

404371 - PCB ASSY., 26 GHZ X 2 MODULE (OPTION 61A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454848-061	PLATE, UWAVE INTERFACE	21793	454848-061
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (4 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (4 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (4 REQ'D)	---	---

404372 - PCB ASSY., 26 GHZ X 4 MODULE (OPTION 61B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K1	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K2	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K3	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K4	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244

404372 - PCB ASSY., 26 GHZ X 4 MODULE (OPTION 61B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454839-2	PLATE, UWAVE INTERFACE	21793	454839-2
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (8 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (8 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (8 REQ'D)	---	---
46	601236	TERMINAL, CRIMP, SNAP-IN, 22-30 GUAGE (2 REQ'D)	27264	08-55-0110
47	601245	CONNECTOR, HOUSING, 2 POS RECEPTACLE	27264	22-01-2026

404381 - TERMINAL BLOCK ASSY., QUICK DISCONNECT (OPTION 80)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401761	PCB ASSY., SHIELD COMMON	21793	401761
5	454837	BRACKET, Q.D. TERMINAL BLOCK	21793	454837
6	454838	PLATE, Q.D. TERMINAL BLOCK	21793	454838
7	454999	BRACKET, INTERLOCK	21793	454999
9	454857	STRAIN RELIEF, SPONGE (2 REQ'D)	21793	454857
10	454860	SPRING, RETAINING, SINGLE (2 REQ'D)	21793	454860
12	601242	CONNECTOR, RECEPT., EDGE/CABLE (2 REQ'D)	58982	PCD-1-B-22
13	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
14	615050	SCREW, PPH, 4-40 X 1.00 (4 REQ'D)	---	---
15	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
16	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
17	921041	LABEL SET, 1250 (2 REQ'D)	21793	921041
19	920962	LOCTITE, 242, MED. STR	05972	242
20	601237	TERMINAL, CRIMP, SNAP-IN, 22-26 GUAGE	00779	102106-2

401761 - PCB ASSY., SHIELD COMMON

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	411761	PCB, SHIELD COMMON (UNLOADED)	21793	411761
5	601839-005	CONNECTOR, HEADER, 5 POST (2 REQ'D)	21793	601839-005
6	601733-006	CONNECTOR, HEADER, 6 POST (2 REQ'D)	21793	601733-006

404363 - OPTION 90, KEYBOARD DISPLAY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401741	PCB ASSY., KEYBOARD DISPLAY	21793	401741
3	454831	PANEL, FRONT	21793	454831
5	454853	OVERLAY, CONTROL PANEL	21793	454853
7	454877	HANDLE (2 REQ'D)	21793	454877
9	454890	EXTRUSION, HOUSING FRAME (2 REQ'D)	21793	454890
11	454892	EXTRUSION, RACK FLANGE, DISPLAY (2 REQ'D)	21793	454892
12	454893	EXTRUSION, HOUSING BEZEL (2 REQ'D)	21793	454893
13	454894	PLATE, REAR, DISPLAY	21793	454894
14	610389	GROMMET, CATERPILLAR	03296	G51H-8
15	601246	SWITCH, ROCKER, SPDT	SEE NOTE 1 TABLE 6.1	1801-1143
16	610887	SCREW, PFH, 6-32 X .375 (4 REQ'D)	08226	507C632R6
17	610890	SCREW, TAPTITE, THREAD FORMING, 6-32 X .375 (8 REQ'D)	78189	---
18	610912	CLIP, FLAT, CABLE (2 REQ'D)	34785	031-0100
21	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (9 REQ'D)	---	---
22	617006	NUT HEX, 8-32 (4 REQ'D)	---	---
23	617104	WASHER, FLAT, #8, LIGHT SERIES (4 REQ'D)	---	---
24	617129	WASHER, LOCK, #8, LIGHT SERIES (4 REQ'D)	---	---
25	910655	SPEC., TAPE, FOAM	34359	4042
26	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---

401741 - PCB ASSY., KEYBOARD DISPLAY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-6	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C7	100117	CAP, CERAM, 470 PFD, 1000V, 20%	56289	C023B102E471M
C8	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C11	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C12	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C13	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C14	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C15	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C16-18	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1-8	210108	DIODE, LIGHT EMITTING, RED	25088	LDH5122
DS1	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS2	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS3	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS4	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
P1	601239	CABLE ASSY.	21793	601239
R1	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R2	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R3	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R4	000471	RES, CARBON, 470 OHM, 1/4W, 5%	81349	RC07GF471F
R5	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R6	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R7	000683	RES, CARBON, 68K, 1/4W, 5%	81349	RC07GF683J
R8	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R9	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R10	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R11	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
U1	230402	IC, DIGITAL	27014	74LS30N
U2	230619	IC, HEX, TRI-STATE INV. BUFFER	01295	SN74LS368
U3	230637	IC, DIGITAL	18324	N74LS244

401741 - PCB ASSY., KEYBOARD DISPLAY (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U4	230637	IC, DIGITAL BUFFER	18324	N74LS244
U5	230637	IC, DIGITAL BUFFER	18324	N74LS244
U6	230386	IC, 8-BIT REGISTER	27014	74LS273
U7	230336	IC, HEX SCHMITT TRIGGER	01295	74LS14
U8	230367	IC, DIGITAL DIVIDER	27014	74LS93
U9	230350	IC, DIGITAL DUAL	27014	74LS74
U10	230237	IC, DUAL ONE-SHOT	01295	SN74LS123N
U11	230350	IC, DIGITAL DUAL	27014	74LS74
U12	230234	IC, 14-DIP, HEX INVERTER	01295	SN74LS04N
U13	230368	IC, DEMULTIPLEXER	27014	74LS138
U14	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
Z1	080042	RES NETWORK, 22K, 10P9R	11236	750-101-R22K
Z2	080022	RES NETWORK, CERMET, 220 OHM, 14P7R, 2%	11236	760-3-R220
Z3	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z4	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
39	411741	PCB, KEYBOARD DISPLAY (UNLOADED)	21793	411741
41	523444	WIRE, TEFLON, STRANDED, 22G, YEL	___	___
42	523888	WIRE, TEFLON, STRANDED, 22G, GRAY	___	___
43	601211	SWITCH, PUSH BUTTON (44 REQ'D)	21793	601211
45	601238	TERMINAL, CRIMP, 18 GA (2 REQ'D)	00779	2-520337-2
47	220000013	TERMINAL, SOLDER (4 REQ'D: TP1-4)	21793	220000013
51	921007	CAP, SWITCH, GRAY (44 REQ'D)	21793	921007

RACAL-DANA Instruments Inc.

SALES, APPLICATIONS AND SERVICE SUPPORT

RACAL-DANA INSTRUMENTS INC.
4 Goodyear Street
Irvine, California 92718
Telephone: 1-800 RAC-DANA
(714) 859-8999 (In CA)
Fax: (714) 859-2505
TRT: 188715

INTERNATIONAL SERVICE CENTERS

Racal-Dana Instruments Ltd., Hardley Industrial Estate, Hythe, Southampton, Hampshire SO4 6ZH, England. (0703) 843265,Telex:47600
Racal-Dana Instruments S.A., 18 Avenue Dutartre, 78150 Le Chesnay, France (3) 955 88 88. Telex: 697215
Racal-Dana Instruments GmbH, Frankenforster Strasse 21, 5060 Bergisch Gladback 1, Federal Republic of Germany, 2204 60081. Telex: 887 8428
Racal-Dana Instruments Italia srl, Via Mecenate 84/A, 20138 Milano, MI, Italy (02) 5062767/5052686/503444, Telex: 315697

REPAIR REQUEST FORM

To allow us to better understand your repair requests, we suggest you use the following outline and include a copy with your instrument to be sent to your local Racal-Dana repair facility.

Model Number _____ Options _____ Date _____

Serial Number _____ P. O.# _____

Company Name _____

Address _____

City _____ State _____ Zip Code _____

Contact _____ Phone Number _____

1. Describe, in detail, the problem and symptoms you are having.

_____

_____

2. If you are using your unit on the bus, please list the program strings used and the controller type, if possible.

_____

_____

3. List all input levels, and frequencies this failure occurs.

_____

_____

4. Indicate any repair work previously performed.

_____

_____

5. Please give any additional information you feel would be beneficial in facilitating a faster repair time. (I. E., modifications, etc.)

_____

_____